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ABSTRACT

The purpose of this pamphlet is twofold: to suggest areas of growing concern to the present and future of higher education and to initiate promising procedures to come to terms with these problems. The format of the document is a question-and-answer guide to be used by college and university administrators. Topics covered include: (1) purposes, goals, and scope of the whole institution; (2) curriculum design; (3) instructional methods used; (4) governance and organization of the institution; (5) type of student on campus; (6) the financial situation of the institution; (7) improvement of student activities and organizations; and (8) the basis for judging quality and effectiveness of the institution, i.e., regional accrediting agencies. A final section offers questions regarding overall institutional improvement. A 54-page supplement containing a list of references and the tables and figures is included. (HS)

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ISSUES AND ALTERNATIVES IN THE FUTURE OF STATE COLLEGES AND UNIVERSITIES

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A REPORT OF THE NATIONAL COMMISSION ON THE FUTURE OF STATE COLLEGES AND UNIVERSITIES

HE 002 821

AMERICAN ASSOCIATION OF STATE COLLEGES AND UNIVERSITIES
One Dupont Circle, N.W.
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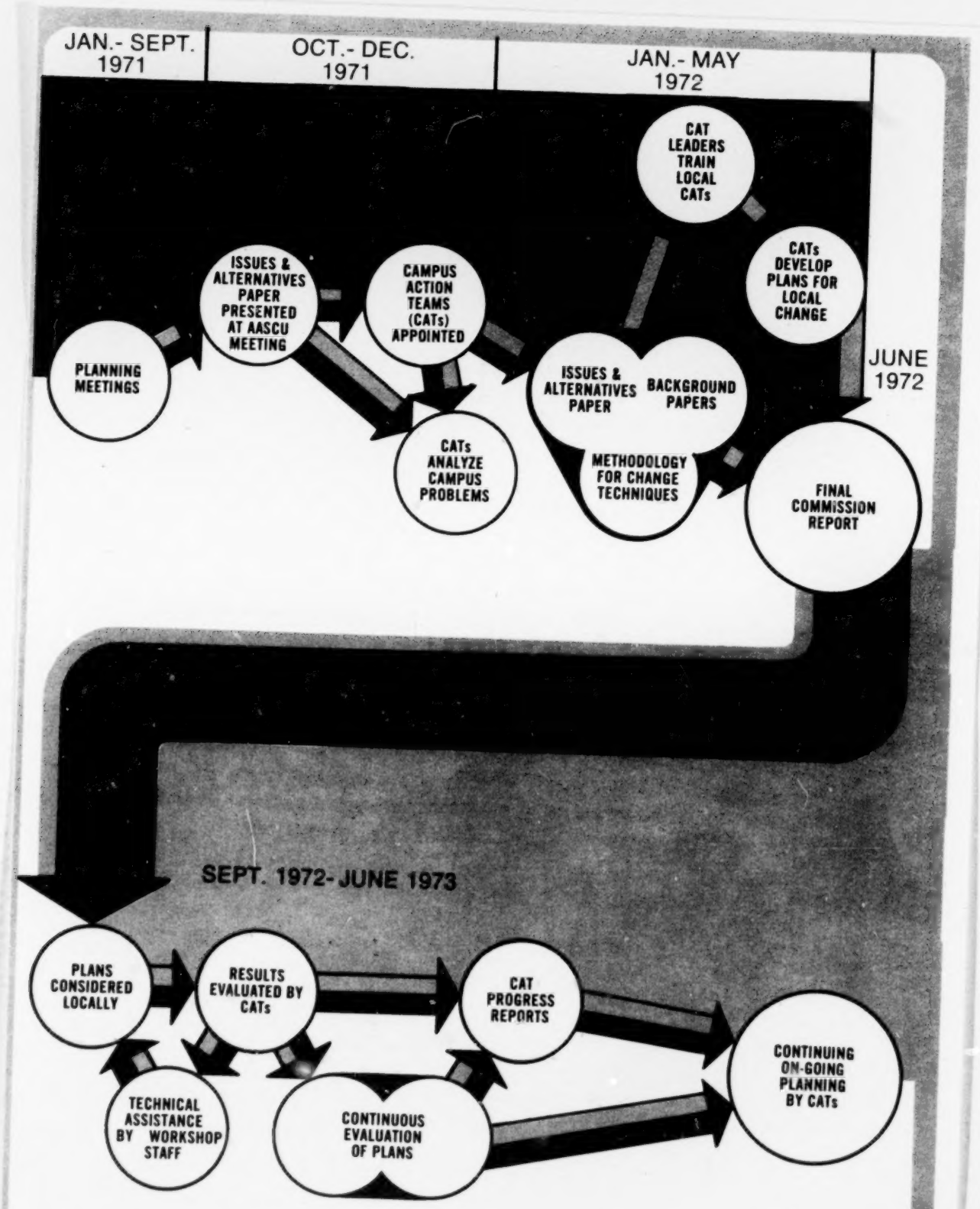

NATIONAL PROJECT TIMETABLE

FOREWORD

The National Commission on the Future of State Colleges and Universities invites the attention of all those interested in these institutions to the 100 Issues and Alternatives contained in this volume. The document should be of special interest to presidents of state colleges and universities and to the members of the Campus Action Teams which your Commission hopes each institution will appoint.

The Commission has deliberately avoided pronouncements. It prefers to raise issues and suggest alternatives for consideration by those in the best place to work with problems—the institutional presidents and Campus Action Teams.

Your Commission has devoted many hours in its meetings and in private study and deliberation to the contents of this Issues and Alternatives statement. It is our first publication for general distribution to the AASCU membership—we earnestly hope it will be of great assistance to member institutions as they wrestle with the vexing problems of the future in state colleges and universities.

Wayne L. Morse
Chairman
National Commission on the Future of
State Colleges and Universities

INTRODUCTION

The National Commission on the Future of State Colleges and Universities has taken as its primary responsibility the encouragement of change for improvement in AASCU member institutions. Some commissions on higher education have liked to look into crystal balls to predict the nature of things-to-come. Others have indicted things-as-they-are. Still others have indicated the nature of things-as-they-should-be. Your Commission has preferred to assume a more modest but, as it believes, a more productive role:

> To suggest areas of growing concern in the present and probably in the future of higher education and
>
> To initiate what we hope is a promising procedure to come to terms with these at the level that counts—back home.

Your Commission has spent many hours trying to identify major areas that would be of concern to any one seriously thinking about the role and responsibility of higher education in today's world. We have tried to look at these particularly from the standpoint of the unique strengths and resources that state colleges and universities can bring to bear upon these issues. We have tried to point out those which are especially worthy of investigation by concerned people right where the action is: on your campuses.

It should be made very clear at the outset that your Commission is fully aware that institutional self-study and improvement have been an ongoing affair. What we do hope is that the thrust of this paper will be to give added support on those campuses which are in mid-stream and will act as a challenge to those institutions which would like to take a new look at themselves and where they are going. The challenge may be not only in the issues raised here but also in the plan for Campus Action Teams as offering perhaps a fresh approach.

The Commission selected nine areas that seem to be significant focal points for decision and constructive action among our member institutions. The number isn't magic; there are others. Within these areas we identified 100 issues. Again, the number is not magic. Distilled from days of conference together and from private thought and research these issues seem representative or suggestive of matters your institutions need to consider if they wish to make the valuable contributions of which they are capable. For each issue your Commission developed a number of alternative ways of addressing the issue. Of course, the selecting and the wording of these issues and alternatives represent preferences on our part as to where we believe we should be investing our individual and collective efforts. But we have tried, in all conscience, to present them in such a way that no one or several ways of considering these problems could be regarded as

"right" or "wrong." Here again we differ from our counterparts in other groups studying higher education at the national level. In so far as possible, we have tried to phrase both Issues and Alternatives so that no one response is expected or desired. We have tried not to anticipate the answer or "load" the alternative. In fact, there would be diversity among the Commission members themselves if we were to try to decide what *ought* to be your positions on these issues. In many cases a number of alternative ways of dealing with a particular issue might be appropriate; sometimes these would suggest a system of priority. But in other cases a "both-and" answer could emerge. There are, it is true, some alternatives presented which would suggest mutually exclusive courses of action. This we recognize and accept. We hope that Campus Action Teams will do so too.

Certainly the Issues and Alternatives are suggestive, but your Commission hopes they are seen as open-ended—not as definitive or exhaustive. In every case, we have tried to invite—infact to provoke—readers to invent or devise different or new answers. It may also be that your "answer" is to reaffirm a commitment previously made.

There are several results which are expected or desired as an outcome of this project. The primary objective, obviously, is to encourage further self-scrutiny on each campus. To this end we ask for Campus Action Teams at each institution. Their main function will be to study their institution as it relates to this document and future development. We hope Campus Action Teams will be sufficiently excited and encouraged so that they will want to carry on a continuing study of the areas of greatest value to them and that this will result in changes to expand the kind and quality of contributions they see as especially appropriate in their own institution. At the very least, your Commission feels it will have accomplished something worthwhile if it has encouraged broader self-study and analysis of issues in most of our member institutions.

A second hoped-for result is feedback from Campus Action Teams on the areas of major interest and some of the alternatives-for-action which they would like to put into effect in their institutions. Some issues may transcend local institutions. Your Commission should give these issues not only serious attention but also the weight of its combined study and conviction. There may very well be matters of principle which go beyond local, regional or state boundaries and which require a strong position to be taken by the National Commission on the Future of State Colleges and Universities (for example, federal funding, or state organizational patterns for higher education).

Finally, we hope to be able to point to ways that the Association may be of assistance to member institutions in planning for improvement. Based on reports from Campus Action Teams it may be possible

to see how the Commission–or some other ongoing organization of its general nature—could be of further help in campus planning for improvement. There may well be indications of services which the Association can provide to AASCU members in dealing effectively and reflectively with some of the issues raised in this paper and in the entire project.

The format of the paper deserves some explanation. There are obviously limitations imposed by space and also by the time and patience of the readers. For instance, the emphasis throughout is chiefly in undergraduate or baccalaureate degree programs. There are questions raised in various sections which point to the graduate phase. A second feature that may be regarded by some as a limitation is the gearing of issues to a presumed four-year baccalaureate program. However, again, it will be noted that particular Issues and Alternatives do suggest the use of other styles and time-periods in defining and implementing the "undergraduate" program.

A third factor should be pointed out which could be seen by some as a limitation. The great diversity apparent in our institutions in their relations with state governing boards or agencies may appear to threaten or limit the kind of institutional autonomy of decision-making that is pre-supposed throughout the project. To the contrary, the Commission sees that some autonomy in terms of decisions regarding the issues raised usually does exist. In other words, there is a distinct possibility that ways in which institutional self-direction can be exercised may not have been fully explored or utilized. Therefore, each issue is intentionally couched in terms to encourage institutional autonomy to be exercised—though perhaps in differing ways on each campus. It has been obvious to your Commission (including as it does representatives from institutions which cover a range from great campus independence to a considerable degree of central control and organization) that "autonomy" has to be cast in terms of the realities of governance and coordination in whatever state it is located and in terms of the particular conditions on each campus.

This same diversity among our institutions accounts for the Commission's decision regarding the sequence of the nine sections. We assume that the first section, *Purposes, Goals and Scope*, and the last *Planning for Improvement*, establish the perimeters necessary for consideration on any campus that is seriously trying to re-define the ways in which it can improve the contributions it could make to its publics. Between these two lie the other seven areas of concern. The second and third sections on *Curriculum* and *Instruction* focus upon the principles that any educational institution must consider in trying to carry out its goals. The fourth section on *Governance* deals with the down-to-earth reality of how to arrange an institution's operations

so it can best deliver the goods to the students it should serve. The question of who these students should be is raised in the next section on *Student Access.* All of the earlier problem areas would remain in a vacuum if it weren't that the public we serve also pays the bills. So, the matter of finance, the proper delivery system and the selective allocation of resources arise naturally in the sixth section, *Finance.* Our business is not only with the general public, but in specific terms it is with the students who really are on the scene at any given time. Areas of concern to the present generation of college students comprise the issues raised in the seventh section, entitled *Student Life.* If any institution is to engage in an enterprise of self-study and improvement, then the matter of establishing criteria for quality and the judging of effectiveness—whatever the particular major area of concern—must be an important consideration. Issues of this nature are taken up in the eighth section, *Quality and Effectiveness.*

In one sense, your Commission views this paper as a "whole" in itself. If a Campus Action Team were to start at the beginning and carry on to the end, as it looked at its own institution, there would be apparent areas in which the institution is operating in mutually contradictory ways. The team might, in fact, see some of the reasons for the disaffection and criticism that prevail today about our campuses, even going so far as to raise questions about their very existence. Some of the possible ways of moving to eliminate inconsistencies would probably become obvious, but the Commission realizes that many Campus Action Teams will not be able to undertake this kind of start-to-finish analysis without supplemental materials or release time. Acting on this assumption, we have tried to raise alternatives for some of the issues in each section which either inevitably or easily lead to consideration of some other major aspect of the whole. We encourage this by use of cross references to other sections where Issues or Alternatives are raised that relate to the original area of concern but are raised from a different vantage point. This also explains why there is intentional over-lapping of problems from one section to another. We have seen this as desirable and necessary for any real human confrontation with very complex matters of crucial import.

If, as we expect, a Campus Action Team chooses a particular area for its focal point, for instance, "Student Access," then it would start with a general understanding of its own institution, the geographic and community setting and responsibilities, the "publics," the present resources and student population and purpose, goals and scope. In terms of these, some—perhaps all—of the issues in Section V would come up for study and consideration. As alternatives were examined and selected or devised to open access to a wide range of students, questions would naturally arise on the utilization of funds, curricular

arrangements and instructional innovations that would implement the kind of access desired. Parts of other sections would now become relevant in terms of the major concern on student access. Finally, as questions arise about the kinds of procedures that might be developed to continue widening student access as desired on that campus, study of the ninth section on *Planning for Improvement* takes on a very real and urgent meaning. As you study this paper you will see that the last question in each section does indeed raise this very question and so should lead to inquiry on some of the pertinent issues raised in Section IX. It is no accident that the very last issue raised in this last section asks how your National Commission and AASCU can offer support to help carry on planning for improvement of the future of each institution.

The Commission tried to keep this paper as short and uncluttered as possible. Yet, we realized that out of the mass of data and references which the Commission has studied and discussed it could and should offer some selected references that would be of help to the campus reader. Key tables and a brief list of references have been compiled in a supplement. Footnotes in this paper refer to particular tables or charts or to bibliographical references in that supplement.

Also included in the supplement is a special analysis of the recommendations of three other Commissions and Reports—the Meyerson group, the Carnegie Commission and the Newman Report. Campus Action Teams, by use of this analysis, can see what other groups have said about some of the Issues and Alternatives that have been raised here.

Here then are the directions, the hopes, and the help offered by your Commission. In the end, the effectiveness of the Project in achieving its goals of encouragement for planning for improvement in the future of the state colleges and universities now rests in your hands.

I. PURPOSES, GOALS and SCOPE

The issues raised here by your Commission deal with certain fundamental questions in regard to the identity you see for your institution. The first three (A — C) invite you to consider where you are now and the direction you think your institution should be moving. Issues D and E refer to the groups or individuals who should be involved in delineating the ways in which purposes, goals and scope should be achieved and in assessing the priority of goals appropriate to your institution. In the next four issues (F — I) questions are raised in regard to the ways in which research and service should be viewed and also the extent and breadth of both undergraduate and graduate programs. The last issue (J) deals with the procedures you would consider desirable in continuing evaluation and planning for refinement and improvement of the ways your institution could fulfill its purpose and achieve its goals. You will want to attack this section, then, with full understanding of the past and the emerging present of your institution as to its own mission and life-style.

A. What is the present scope of your institution? (See Figure 1)

1. A single-purpose highly specialized college
2. A teachers' college
3. A multi-purpose state college
4. A multi-purpose state university
5. A regional state university
6. A comprehensive university
7. Some other type

B. To enable your institution to fulfill its own mission, what *should be* its scope? (See Figure 1)

1. A single-purpose highly specialized college
2. A teachers' college
3. A multi-purpose state college
4. A multi-purpose state university
5. A regional state university
6. A comprehensive university
7. Some other type

C. Which, if any, of these types or organizations do you consider would be appropriate for your institution? (See Reference 4)

1. Consortia of institutions
2. Correspondence emphasis

3. External degrees
4. "Universities without walls"
5. Upper-division and graduate program only
6. "Cluster" colleges
7. 3-year institution
8. Comprehensive state college (4 or 5 year program)
9. Grades 11 — 14
10. Some other model or type

D. Who should interpret or define the ways in which purposes, goals and scope will be fulfilled at your institution? (See Section IV, *Governance and Organization)*

1. The institution as a whole
2. Society, in the form of governing board, citizens' groups, the legislature, etc.
3. The federal government
4. The present student population
5. The faculty
6. The administration
7. The president
8. A council on higher education
9. Some combination of the above
10. Some other group or agency

E. To what extent (and in what sort of priority) should any of the following be major goals of your institution?

1. To prepare students to become contributing members of a democratic society
2. To provide a firm understanding of the intellectual purposes of a college
3. To assist individuals in becoming educated, decision-making adults capable of contending with the contemporary problems of a changing society
4. To improve a student's ability to examine his society critically and constructively
5. To foster a sense of intellectual inquiry, social responsibility and community involvement
6. To provide opportunities that produce mature experiences regarding the nature and use of freedom
7. To instill the idea that, as prospective agents of change, every individual has a commitment not only to his institution but also to society
8. To actively foster the recognition of personal responsibility
9. To provide opportunities for meaningful communication among students, faculty and administration

10. To provide a focal point for the morale, spirit and loyalty of the college body to gather around; offer common ground where enthusiasm is openly shared by all
11. To provide for choice and adequate preparation in a career
12. To encourage in students a commitment to social egalitarianism
13. To encourage students to be critical of and politically activist in social reform
14. To foster the enjoyment of the aesthetic values of life
15. To perpetuate religious values among students
16. To help students commit themselves to public service
17. To educate for membership in an international community
18. Other major goals

F. What should be your institutional priorities with regard to these forms of research?

1. Conventional research
2. Applied research
3. Basic theoretical research
4. Contract research
5. Research related to the needs of the region or community
6. Institutional research
7. Instructional research
8. Other forms of research

G. What should be your institutional priorities with regard to these forms of service?

1. International service
2. National service
3. State service
4. Regional service
5. Instructional service in the institution itself
6. Community service
7. Service, related to research
8. Extension work
9. Continuing education
10. Other types or directions of services

H. What directions should graduate programs take in your institution?

1. Expanded research
2. Improvement of existing programs, rather than developing additional ones
3. Fifth-year programs

4. New masters programs
5. Conventional professional doctoral programs
6. Conventional Ph. D. programs
7. Experimental advanced degree programs emphasizing preparation for personnel in higher education (e.g., community college faculty)
8. Programs for teachers and middle-administrators in professional and para-professional careers (e.g., *teachers* for nurses, for hospital-management, etc.)
9. Specialist degree programs
10. Intern and extern programs
11. Expansion of programs based on data of manpower needs
12. Other directions

I. **How should your institution view the breadth of its undergraduate professional programs?**

1. As confined to education or to other already existing professional preparation offered
2. As reflecting present, changing or predicted needs in professional programs, related to present offerings
3. As preparing students to be able to move easily into fields related (by "cluster") to their present goal or career-plans
4. As offering programs, based on future-needs data, in altogether new areas, regardless of present resources
5. On some other bases

J. **What procedures should we use in the continuing evaluation as to roles, purposes, goals and scope of our institution? (See appropriate issues and alternatives in Section IV on *Governance and Organization* and Section IX on *Planning for Improvement*)**

II. CURRICULUM

Since decisions as to where you want to go and where you can go in terms of curricular improvement are always based upon where you are now, your Commission raises as the first issue in this section, "Where are you?" Issues B and C ask you to point the direction it seems both possible and desirable for your institution to move in curricular patterns and goals. The next three issues (D–F) deal with questions as to the desirable balance between general education and career oriented curricula. Special emphasis is placed on the teaching career since this is of historic importance in many of your institutions. In addition, other possibilities for career education are dealt with in a second part of this section. Issues G — I suggest questions related to the challenge offered by changes in the student population and new ways of regarding the whole concept of *curriculum* and innovations for improvement in this area. The next issue (J) raises the knotty problem as to whose responsibility it should be to decide on curriculum design and content.

A second part of this section (Issues K — P) deals with specific programs, both graduate and undergraduate, and related curricular issues. (See Reference 8)

The final issue (Q) is designed to turn your attention to the very important matter of procedures that may be most helpful in planning for improvement of your curriculum at any level. (See also Section IX, *Planning for Improvement)*

A. **How *is* the curriculum now arranged at your institution?**
   1. Structured courses in standard disciplines
   2. Some interdisciplinary courses incorporated into a conventional curricular structure
   3. Emphasis on off-campus experiences as supplementing conventional curricular arrangements
   4. Inclusion of "extra-curricular" activities as now carrying conventional credit (e.g., activities in student government, debate, athletics, journalism, drama, band, etc.)
   5. Inclusion of off-campus service for conventional credit
   6. Total effort at a non-traditional approach to curriculum
   7. Some combination of the above
   8. A different concept and arrangement of curriculum

B. **How *should* the curriculum be arranged on your campus?**
   1. Continue with improvement of present curriculum patterns
   2. Add new humanistic courses
   3. Abandon fixed courses altogether
   4. Combine usual structure with less-conventional experiences — granted full credit
   5. Re-examine the entire concept of "curriculum" to enable planning of experiences without relation to credit or to conventional disciplines

6. Restructure curriculum while maintaining "course" structure but re-examining content arrangement through a combination of the usual form of academic disciplines with some interdisciplinary arrangements
7. Re-examine and rearrange the concept of content proper to "General Education" curriculum
8. Better articulate the relationship between general or basic curriculum and specialized or career-oriented curriculum
9. Restructure curriculum into "core" experiences, entirely interdisciplinary in nature
10. Utilize a systems approach in curricular structure
11. Combination of some of the above
12. A different approach

C. If any or all of the following are to be regarded as valid curricular goals at your institution, what sort of priorities would be most appropriate?

1. Career-preparation (not only the present offering but also for emerging region or national needs)
2. International understanding and citizenship
3. Assimilation of students of varying cultural backgrounds
4. Preservation of values of the differing cultural backgrounds of the students
5. Developing skills in decision-making
6. Providing for both cognitive and affective learning experiences
7. Enable students to choose from among varied experiences those that are most valuable for their own self-fulfillment
8. Provide for a basic background in intellectual and humanistic studies
9. Reflect and serve national concerns and interests
10. Other curricular goals

D. If your institution is such as to make it desirable to regard the curriculum as specialized (career-oriented) in combination with basic or general education, what "mix" would be most appropriate? (See Tables 4a — 4d)

1. Basic general education in first two years, specialized in last year(s)
2. Area requirements in general education spread evenly over the entire undergraduate sequence
3. All of the undergraduate program devoted to general (liberal) education curriculum offerings; professional and/or career in post-baccalaureate curriculum

4. Reduction of program to three years of professional or career-oriented curriculum
5. Area requirements in general education largely in lower division; career-oriented curriculum beginning in first or second year and dominant in last year
6. A planned mixture of conventional discipline and interdisciplinary courses, both for the general and for the professional or career-oriented parts of the curriculum
7. Some combination of these
8. A different arrangement including both career-oriented and general education curriculum

E. If your institution is partly, largely or wholly oriented to teacher preparation, what emphasis should there be on the following kinds of teacher-education curricula? (See Tables 3a and 3b and Reference10)

1. Geared to teaching in inner city, ghetto or other impoverished educational situations
2. Curriculum directed toward preparation of recreation, health, sex education or other special teachers as needed by the community
3. Toward general teacher-education curricula, with the specialization occurring in post-baccalaureate years
4. Decreasing emphasis, as teacher market declines
5. Shift altogether away from curricula geared to teacher preparation
6. Development of curricula that will provide students with easy transfer to employment in education-related fields
7. Some combination of these
8. A different orientation from any of these

F. If your curricular structure is such that general education should be regarded as an important element, what should be its major purposes?

1. Exposure of all students to a wide variety of disciplines and modes of thought
2. Requiring all students to have the same experiences in the basic disciplines
3. Providing exploratory experiences to help students select their major area of specialization
4. Affording possibilities of self-fulfillment
5. Transmission of the cultural heritage
6. Providing basic skills and knowledge on which a student will build whatever career-oriented curriculum he may choose

7. Some combination of these
8. Curricula in general education should be abolished
9. Some other major objectives not listed above

G. To what extent should the curriculum in your institution be geared to a changing student population (stop-and-go students; married women; culturally different and/or deprived; transfers from community junior colleges; students with special abilities, differing from the usual academic preparation, etc.)? (See, in this connection, Section V on *Student Access*).

1. There should be a complete re-tailoring of curricular patterns to allow the non-traditional student to be absorbed with a minimum of stress
2. The curriculum pattern should be flexible enough to allow the non-traditional student to enter, but he should be expected to fit into the pattern
3. The principal curricular pattern should remain geared to the conventional high school graduate
4. The curricular pattern, while oriented primarily to the conventional student, should have built-in features to afford special placement, remedial help, tutorial arrangements, etc. to accommodate non-traditional students
5. Some combination of these
6. There should be no expected curricular pattern so that students (regardless of age, experience, etc.) could proceed at their own rate towards a degree
7. There should be some entirely different arrangement of curriculum patterns to handle the changing student population.

H. How should you arrange the relation of the conventional curricula with other types of experiences at your institution (these have often been referred to as "extra-curricular" experiences)?

1. These other experiences should be treated as of equal value with the conventional curricular experiences, but should carry no credit
2. All experiences should be regarded as co-curricular—credit should be accorded for all
3. There should be a clear-cut distinction between those which are associated with a planned curriculum, and those which aren't. The latter should be intentionally supported and encouraged, but they should retain their voluntary character
4. The curriculum itself should be re-examined and rearranged to include (some or all) activities and experiences of the sort which were formerly regarded as extra- or even co-curricular

5. Some other relationship between these aspects should be devised

I. If some major modification of curricular pattern, goals and/or content is desirable on your campus, which if any of the following would be most helpful in effecting such improvement?

1. Elimination of usual hourly schedule concept to allow for more imaginative arrangement of learning experiences
2. Discarding all curricular requirements, making choice purely by student-selection
3. Adopting plan of "area requirements" with some interdisciplinary offerings, certain local or school service projects and other variations on the conventional course arrangement, encouraged as means for meeting these requirements
4. Use of regional consortia or dual enrollment at sister institutions to widen curricular opportunities
5. Revision of standards for graduation and the establishing of new guidelines to allow for greater curricular flexibility and/or innovation
6. Exploration of new ways in which the curriculum could be more closely oriented to community service
7. Use of area requirements both in general and in specialized aspects of the curriculum with options for fulfilling these requirements through conventional course arrangements by disciplines and also through interdisciplinary course offering
8. Greater use of institutional research to maintain a closer relationship between student needs, abilities and purposes and the curricular offerings and arrangements
9. Re-examination of curriculum design techniques to insure that there is the opportunity for cooperative student-faculty involvement
10. Continuing re-examination of curricular design to insure that curriculum arrangements keep pace with changing institutional goals (this would involve not only adding, but pruning programs and curricula)
11. Greater utilization of data on changing career opportunities as guide to curricular arrangements (See Tables 5a and 5b)
12. Some combination of the above
13. Some other conditions or means

J. On your campus, who should be involved in making decisions about curricular design and content? (See also Section IV on *Governance and Organization*)

1. The head of each individual department, school, college or division acting independently for his own curriculum

2. A faculty committee for each individual department, school, etc. acting independently for its own curriculum
3. A faculty-student committee for each individual school, department, etc. acting independently on its own curriculum
4. An all-institution committee consisting of faculty representatives
5. An all-institution board consisting of members elected from the student body, faculty and administration
6. An all-student committee
7. The administrative council
8. Academic dean or academic vice-president
9. The president on advice or consultation with some or one of the above
10. The president
11. The governing board or central agency
12. A council representing all institutions of higher education in the state, region, community
13. A council or committee representing the institution and the community or region with which the institution is most closely related
14. Some other group or individual

K. To what extent should your institution provide for international education?

1. No special emphasis
2. Separate programs in international education
3. Area studies
4. International emphasis throughout
5. Visiting foreign faculty and students
6. Study abroad
7. Service abroad by faculty
8. Speakers and colloquia
9. Others

L. To what extent should your institution provide programs in health and health-related fields?

1. No expansion of programs into health-related fields
2. Expansion of enrollment in existing health programs
3. Establish new programs in the health fields
4. Establish new programs in the allied health fields at the baccalaureate level
5. Establish new programs in the health fields at the masters level

6. Establish programs for the preparation of health field instructors for junior/community colleges
7. Establish premedical and other preprofessional programs in the health fields
8. Other

M. To what extent should your institution provide for environmental education programs?

1. No emphasis or separate program
2. Separate programs in environmental education at the baccalaureate level
3. Separate programs in environmental education at the masters level
4. Environment education emphasis throughout the curriculum but with no special program
5. Speakers and colloquia on environmental education
6. Expansion of enrollment in existing environment-related fields
7. Other

N. What is the proper role of your institution in providing an urban education program?

1. No special emphasis
2. Separate programs in urban education at the baccalaureate level
3. Separate programs in urban education at the masters level
4. Urban emphasis throughout the curriculum
5. Urban education and community service-related programs
6. Speakers and colloquia on urban problems
7. Urban education intern programs
8. Special training program for prospective urban teachers
9. Others

O. To what extent should your institution provide programs in engineering and technology?

1. No special emphasis
2. Expansion of enrollment in existing programs
3. Establish new programs at the less than baccalaureate level
4. Establish preprofessional programs
5. Establish new programs at the baccalaureate level
6. Establish new programs at the masters level
7. Establish programs to include field experience and intern programs
8. Others

P. What should be the role of your institution regarding graduate education?

1. Discontinue or de-emphasize graduate programs
2. No emphasis on graduate education
3. Special emphasis on graduate education in professional fields at the masters level
4. Special emphasis on graduate education in liberal arts fields at the masters level
5. Special emphasis in selected fields at the masters level
6. Special emphasis in selected fields at the specialist level
7. Special emphasis in selected fields at the doctoral level
8. Development of Doctor of Arts programs
9. Others

Q. What procedures should you use for continued evaluation and improvement of curricular design and structure? (See appropriate issues and alternatives in Section IX on *Planning for Improvement.*

III. INSTRUCTION

The first issue suggests that Campus Action Teams examine what kinds of instructional patterns are prevalent on your campus. The need for beginning in this way is obvious when you realize that these patterns will be the takingoff point for whatever improvements, if any, you see as desirable. Whatever these may be, and this is the question raised in the second issue, they are still enmeshed in the existing institutional goals and learning objectives that are now considered important on your campus. The alternatives you consider in Issue B will suggest the kinds of priorities you may want to consider in issues C and D dealing with the factors and the evaluative approaches appropriate to instructional improvement as you define it. The next four issues (E - H) raise questions as to the condition and the means that might be arranged to encourage improvement of instruction on your campus. Issues I — K focus at the hard question of how to get instructional improvement under way and to keep it going.

A. **Overall, what *are* the patterns of instruction now predominant at your institution?**

1. Lecture-discussion-laboratory
2. Programmed learning in basic courses
3. Independent study and seminar in upper-division and/or in students' major areas
4. Some combination of these
5. Others

B. **Which, if any, of the following instructional patterns *should* you adopt on your campus?**

1. Large classes at the lower-level and small classes at the upper-level
2. Small classes at the lower-level and large classes at the upper-level
3. Variety of large, small and seminar experiences for all levels
4. Lecture-discussion-laboratory
5. Individualized and/or programmed instruction in general requirements, independent study and seminars in students' major areas
6. Unstructured learning experiences with senior exams based upon objectives related to career or liberal education goals
7. Planned credit for experiences beyond the classroom

8. Independent study and research
9. "Challenge exams" offered at any point in a student's educational career
10. Computer-assisted instruction
11. Correspondence courses
12. "Open university" (similar to the British model)
13. Tutorial arrangements
14. Taped lectures
15. Some combination of the above
16. Same as we are now doing
17. Other patterns

C. **What *factors* should be considered in encouraging innovation and creativity in instructional approaches in your institution?**

1. The kind of content which could be most appropriately handled by technological teaching aids
2. Kinds of learning experiences in which interpersonal reactions and relationships should be emphasized
3. Resources of the faculty (experience, willingness—or unwillingness—to experiment with new approaches)
4. The relative costs in relation to the expected gains in student learning
5. The percentage of the institution's resources that should and can be utilized in developing new modes of instruction and in evaluating current practices
6. Innovation and experimentation encouraged regardless of these or any other factors
7. Some or all of the above
8. Other factors

D. **What *techniques* should be used to encourage self-evaluation and improvement of instruction on your campus?**

1. Use of the concept and techniques of "teaching accountability"
2. Peer evaluation of colleagues' teaching effectiveness
3. Administrative review and appraisal of instructors' work reported back to instructors
4. Student evaluation, campus-wide or by individual instructors and/or departments, schools, etc.
5. Evaluation by an all-college committee
6. Departmental committee evaluation
7. Use of various groups depending on the kind of teaching situation being evaluated

8. Alumni evaluation
9. Combining some of the above
10. Other techniques

E. What *standards* should be used for evaluating teaching and instructional effectiveness?

1. Use of the behavioral objectives of the particular course, program or field being evaluated
2. Based on a view of the professor as coordinator or facilitator of learning, rather than primarily as instructor
3. On the basis of established objectives of content or skill in the area being evaluated
4. On the basis of the particular form of instruction being used (i.e. seminar, laboratory, field or work-study programs) which require different evaluative standards or criteria
5. Some combination of these
6. Some other standards

F. Which, if any, of the following should be examined or changed to enhance the teaching environment on your campus? (You may wish to think of these in terms of priorities of time, expense and importance.)

1. Involving faculty in the developing of policies relating to instruction
2. Faculty retirement plans and other fringe benefits
3. Classroom conditions and general institutional support to stimulate more effective instruction
4. Office conditions which will encourage more counselling, conferences, etc.
5. Sabbatical leaves available for worthwhile projects—particularly those relating to improved instruction
6. Inservice education for faculty
7. Funds for creative teaching projects
8. Teaching and research assistants
9. Short-term leaves designed to up-grade instruction
10. Greater prestige attached by college community to undergraduate teaching
11. Greater recognition for imaginative teaching
12. Some combination of these
13. Others

G. **What should be done to attract and retain faculty who excel in their role as teachers on your campus?**

1. Retain customary merit system
2. Develop a reward system based not on any merit system but at discretion of administration, department head, dean, faculty, students, etc.
3. Develop new procedures of financial rewards for teaching excellence and effectiveness
4. Devise a renumeration formula based on relative priorities attached not only to research, publication and continuing academic preparation but also to outstanding teaching
5. Develop greater flexibility for granting degree equivalency and/or promotion based on graduate work or on non-conventional experience or preparation where this seems particularly to contribute to excellence in teaching
6. Faculty seminars involving experts in field
7. Ample time for study and research
8. Encouragement of coordinated teaching, research and service activities
9. Common teacher-retirement plan operative across state lines
10. Devise better procedures for granting tenure and promotion based on improved means of instructional evaluation
11. Utilize some combination of these
12. Others

H. **What practices for evaluating and reporting student achievement would be most appropriate on your campus in order to encourage improvement of instruction?**

1. Conventional exams, papers, research, etc. with A, B, C grades
2. Conventional exams, papers, research, etc. with Honors, Pass, No Pass grades
3. Pass-No Pass in all non-major work with usual grades in major work
4. Pass-No Pass in all work completed
5. "Honors"-"Pass"-"No Credit" marking system
6. Senior exams in major area of concentration
7. Outside examiners certifying either competence or non-competence
8. Faculty review boards
9. Reporting of "Reasonable Progress toward a Degree"

based on evaluation procedures chosen by faculty or department

10. Devising new methods and criteria for fulfilling degree requirements (e.g., choice among conventional research, comprehensive exams and/or "action research," internships, etc.)
11. In graduate degree programs standard M.S., M.A. thesis, doctoral study or dissertation
12. Some combination of these
13. New or different approaches

I. **On your campus, who should make decisions on matters relating to instruction such as class size, new facilities, teaching aids, adoption of new media or approaches to instruction, etc.?**

1. Faculty-administrative committees
2. A committee composed of representatives of all segments involved
3. The president
4. Head of the department, division or school involved
5. The administration, or the president, on the advice of a representative committee of students and faculty
6. Administrative council
7. Some combination of these
8. None of these, the decision should be made by the governing board or body
9. Coordinating agency
10. Some other group or person

J. **How ought quality of instruction and instructional costs be assessed and inter-related on your campus?**

1. Evaluation of instructional effectiveness to precede budgetary allocation
2. Continuous cost-effectiveness studies
3. Responsibility of president and deans to be aware of cost relation of instructional effectiveness
4. Institutional research planned to produce data on cost of different instructional techniques
5. Use of formulae to estimate costs per instructional program as basis of budget plans and requests
6. Quantitative data based on cost per student per instructional unit
7. Some combination of these
8. No effective way of relating cost and quality of instruction
9. Some different approaches

K. **What procedures should you use for ongoing evaluation and improvement of total effectiveness of instruction? (See also appropriate issues and alternatives in Section IV on *Governance and Organization*, Section VIII on *Quality and Effectiveness* and Section IX on *Planning for Improvement.*)**

IV. GOVERNANCE AND ORGANIZATION

In any form of institutional governance, the Commission recognizes that there is a necessary relationship between the *authority* to make a decision on some policy or action and the *responsibility* for the success or failure of its outcome. Therefore, the structure and organization of an educational institution should be arranged in terms of the principles of governance that operate there. Your Commission also assumes that there are certain criteria that any institution would probably prefer for its campus such as:

1. cooperative effort among the component elements in that institution
2. flexibility so that changes can be achieved where needs are identified
3. room for deliberation and communication among the constituent elements of the institution
4. quick decision where this may be necessary
5. some type of internal checks to insure that no one group or individual can operate for personal self-interest

See AASCU statements on Rights and Responsibilities of College Presidents (Reference 1) and AASCU draft statement on Institutional Rights and Responsibilities (Reference 2)

The issues of governance in an educational institution revolve around the basic question of what model to adopt or adapt. Depending upon that decision, certain questions arise regarding the role and function of each constituent element in the institution and, thus, the structure and organization of that institution. In this section, more than in any other, the choice of one set of alternatives in respect to an issue precludes the choice of certain others. It is obvious that the particular nature of each institution and the relationship it holds to the state funding and/or governing agency will make some models of governance more appropriate than others.

The form that this section takes is: first, to set out briefly four models for governance, organization and structure. There certainly are others, and you are invited to devise one which nevertheless takes into account the criteria and assumptions offered above. Issue A is then raised as to the choice of the most feasible model for your institution. However, as you are considering the following six issues which suggest certain arrangements and roles appropriate to each model, you are encouraged to reassess your original decision as to the preferred model. Issues B - E point up alternative functions and roles in governance if you were to select a particular model to adopt or adapt at your institution. The next

two issues (F and G) invite you to consider how certain aspects of flexibility and cooperation would operate in the model you are considering. Issues H - J raise questions as to what should be done to move your campus toward the pattern of governance and structure that you deem desirable. There are, in addition, some other questions that relate to the proper posture of the institution in regard to other matters regardless of the particular kind of governance and organization that prevails. These are covered in Issues K - L. The last issue injects the question of institutional governance into the setting of planning for improvement.

Model 1: All those affected vote on all decisions on policy and the implementation of policy. This decision governs, and those voting are held accountable.

Model 2: Decisions are made by a representative body with delegates elected from the institution's constituent elements (students, faculty, administration, staff or other). Decisions arrived at by this body are final and it is held accountable.

Model 3: Major decisions on policy and its implementation are delegated by the governing board to the president of the institution. He is responsible to that board for the effective execution of these policies. Most major decisions are made with the advice and consultation of any part of the institutional community affected or knowledgeable. Consensus and concept are desirable but may not always be possible.

Model 4: Major decisions on policy and its implementation are made by the governing board and/or central planning agency. The president is delegated the authority for carrying these out and is held accountable to the higher agency. Decisions arrived at by the president govern the institution.

Model X: This represents some other really different arrangement for the authority and responsibility involved in making major decisions and in the implementing of policy. It may be devised by a particular institution but should recognize the principles suggested above on flexibility, cooperative deliberation, ease of quick decision, checks, etc. It should show the authority-responsibility relation.

A. **Considering your own institution and its situation in your state, which of these models seems most appropriate?**

1. Model 1
2. Model 2
3. Model 3
4. Model 4
5. Model X

B. **Based on the model you think most appropriate, what should be the proper functions and the relationships among each of the constituent groups on your campus?**

1. All members of the institution know about and decide by vote on each issue. All are responsible for the success or failure of the decision reached by majority vote. President, administration, faculty and students operate to carry out policy decisions.
2. Each faculty member elects representatives to a faculty organization which assumes responsibility for making decisions and for implementing them. Students, administration, faculty and staff implement policies determined by the faculty organization.
3. Each student votes to select representatives to a student organization which has the authority to make decisions and the responsibility for carrying them out. Staff, faculty, administration, etc. play whatever role may be assigned to them by the student organization. They may be consulted, but their views do not result in policy decisions, nor in governance.
4. Each student, faculty member, administrator, staff member, etc. votes to select members of its own group as representatives on an all-institution governing organization. It has full authority and responsibility for decisions on policy matters—the governance of the institution. Thus the function of each person is determined by the actions of the organization. The role he plays in governance is to elect a representative and to discuss with him matters to be taken up by the organization. This organization deals directly with the governing board and is directly accountable to it. The president, administration, staff and faculty play whatever role is necessary to execute decisions reached by the all-institution organization.
5. The president makes ultimate decisions on policy and on its implementation and is responsible for the outcome of these to the governing body. Faculty, students, administrative personnel and staff, grouped by senates,

committees, councils, etc. are delegated certain responsibilities and are consulted on these matters. The ultimate responsibility lies with the president.

6. The president executes policies established by the governing body advised by administrative council, affected student or faculty groups, etc. But responsibility for the institution's operation lies with him, and he is held accountable for its activities to the governing body. Other constituent groups play the role necessary to carry out policies.
7. Some other arrangement by which authority and responsibility are exercised with functions dispersed accordingly.

C. **What should be the major governance role played by the students?**

1. To learn and to be actively engaged in student and community affairs if they choose but not to enter into the governance of the institution. A student organization may operate, but it should have nothing to do with decisions of overall institutional importance.
2. To govern the institution through their representatives in their own organization. This includes policies and their implementation. The student organization may seek data from appropriate sources in faculty or administration but is held solely responsible for the functioning of the institution to the governing body.
3. To vote for their own peers to represent them to an all-institution organization and to work cooperatively to carry out the policies decided upon by this body. The student delegates work with representatives of faculty, administration and staff to make policy decisions and to implement these policies. Authority and responsibility lie with the all-institution organization and its members are accountable to the governing body.
4. To work cooperatively with other students, faculty, administrative officers, staff and community representatives to review and study matters which affect them or the whole institution. Special areas of concern may be the focus of ongoing committees or councils and their advice and recommendations would be considered and balanced with those offered by other groups. This should include an active role in seeking and selecting high administrative officers. Decisions and responsibility would lie with the president and the governing body.

lie with the president and the governing body.

5. To work in committees, councils, senates, etc., studying and discussing such matters as may be referred to them by the president or the administration. Their recommendations will be heard, but they may or may not be followed. Their function and role is for consultation and not for decision-making. Thus they are not held accountable for the outcome of decisions arrived at by the president or for implementation of policies decided by the governing body.
6. Roles appropriate to some other arrangement of authority and responsibility for governance.

D. Depending on the model you think is most appropriate on your campus, what should be the major roles played by the president in governance?

1. To serve as fund-raiser, public-relations expert and/or scholar—but chiefly as an administrative officer responsible to the faculty, students, staff and other constituencies of the institution for the tasks delegated to him.
2. To serve as an administrative officer, responsible to the governing body for carrying out the policies and procedures assigned to his institution. He may seek information and support from faculty, students and staff but is bound in no formal way to any committee, senate, council or agency.
3. To act as intellectual leader of the institution, responsible to the governing body for the outcome of his policy decisions. Since success of these probably depends upon cooperation and understanding of the rest of the campus community, he should encourage the operation of various committees, councils, senates and other advisory groups to provide for communication. Ultimate decision and responsibility lie with him, but his responsibility is both *for* and *to* the institution.
4. To serve as coordinator of the institution and of other administrative personnel to whom he delegates responsibility for discharge of functions lying in their particular field or expertise. He delegates to faculty, students, staff or other groups responsibility for matters closely affecting them and holds each responsible. In turn, he holds each group accountable both to its constituents and to the governing body.
5. Some other collection of roles in terms of institutional governance, organization and structure

E. Depending on the model you think is most appropriate on your campus, what are the proper functions and roles of the faculty in institutional governance?

1. Faculty members vote on major policy questions. The majority vote is the one adopted. Implementation of policy is decided either in the same way or by use of a group of committees which formulate possible alternatives and submit these for faculty vote. Each faculty member takes responsibility for the majority decision and all are held accountable.
2. Faculty members elect colleagues either to a faculty or to an all-institutional body to hear and discuss business underway in that body. Faculty delegates may either vote their own opinion or poll their constituents. In either case, the representative body assumes responsibility for either executing or delegating the implementation process. Faculty representatives are accountable both to their own constituents and to the governing body.
3. The faculty operates as directed by the student organization, but neither makes decisions nor is responsible for their outcome except for their teaching and research function.
4. The faculty is charged with its professional function and with playing some active role in academic organizations. A faculty member may discharge his duties if elected to a senate or an office in the various faculty groupings. He may bear responsibility for helping make or advise on decisions both as to policy and implementation of policy if the matter involves him, his job or his special concerns and interests. Ultimately, his function in institutional governance is for consultation, data-gathering and making recommendations. He may also have a function in helping evaluate the outcome of new policies as they are implemented.
5. Faculty members are expected to serve on various committees to study, discuss and make recommendations at the discretion of the president. Having made their recommendations, their function in this capacity is fulfilled. Their primary role is that of teacher, researcher or another particular job to which they are assigned. They do not have either authority or accountability for policy decisions or for the implementation of policy.
6. Some other major functions in terms of authority and responsibility for institutional governance.

F. **To what extent should communication, cooperation and consensus emerge as institutional patterns in governance on your campus?**

1. Communication and consultation should be entirely informal and voluntary. Other segments besides the faculty may not know or care about governance.
2. There should be cooperation and communication among the members of the governing body and between its members and their particular constituencies. There are no built-in factors encouraging communication among the various elements or with the president or administration.
3. The amount and quality of communication, cooperation and consensus should vary depending upon the way in which committees, councils, and other groups were formed, used and articulated on the campus. The size and the heterogeneity or homogeneity of the campus community would be a factor affecting this.
4. Amount of communication and cooperation should vary inversely with the number and urgency of crises which the institution faces. On matters pertaining to long-term plans, and not prescribed by the governing body, there should be a great deal of cooperative effort and discussion and possible consensus, in direct proportion to the quality of communication lines.
5. The amount and quality of communication and consensus would vary depending upon what the arrangements were for making decisions and bearing responsibility. However, the numbers and kinds of groupings of various members of the community and their relation would need to be carefully identified and articulated.

G. **To what extent should there be built-in techniques on your campus to encourage flexibility, room for deliberation and checks and balances recognizing the necessity to make quick decisions when needed?**

1. Flexibility is a built-in ingredient since there is no procedure except majority vote by faculty. Deliberation is a variable, depending on the way balloting and discussion of questions are handled. A quick decision would be difficult or impossible because of the necessity for majority decision. There could be no internal checks built in. Any that operated would be external through the governing body

2. Both flexibility and deliberation are built in with limits as to the variety of groups involved in the deliberation, as noted in Issue F. Immediate decision would be difficult unless the president or the governing body were granted emergency powers to act. Checks would be difficult in either a faculty or a student organization. In an all-institution organization the fact that there are many voices might allow for checks but could also lead to stalemate
3. Possibility for quick decision is a built-in feature. Flexibility, deliberative room and checks could exist by use of a number of different procedures: establishment of various groups to act as countervailing powers (e.g., senates, chapters of AFT, NEA, AAUP, departmental, inter-departmental committees, institution-wide committees, etc.) and procedures established and maintained intentionally for communication among these and with the president. Organization charts would be characterized by many double-headed arrows and by broken as well as solid lines
4. The possibility of quick decision is a built-in feature. Both flexibility and deliberative aspects would have to be intentionally introduced. Because of the subordinate role of the president to the governing board, internal checks would be difficult. Deliberative room and flexibility could be encouraged by the establishing of procedures and committees with two-way flow of communication
5. The inclusion of flexibility, checks and deliberative review and provision for quick decisions would have to be planned in accord with the authority-responsibility model devised for decision-making and governance

H. What ought to be priorities in reorganization considering the model you have selected?

1. The dissolution of all existing decision-making units
2. The establishment of procedures for formulating policy and policy alternatives and for polling faculty for all decisions
3. The reconstitution or establishment of a faculty, student, or all-institution organization with full decision-making power and authority and the redefinition of role of administrative personnel as "house-keepers" carrying out decisions of the governing body

4. The dissolution or reconstitution of existing organizations to change their role to that of consultation-upon-demand, rather than attempting to make policy decisions as to policy
5. The rearranging of senates, councils, boards, committees, etc. to redirect their energies to study, recommend and articulate these as they relate to each other and to the president
6. The restructuring of the relationship between the institution and its governing board to grant greater authority to the governing element
7. The restructuring of relationships to encourage greater autonomy in the institution for policy-making and implementing of decisions, with lines of authority clearly understood by the governing body, faculty and administration and/or the president
8. Some other form of reorganization designed to encourage clearcut lines of responsibility-authority with provision for communication, deliberation, cooperation, flexibility, checks and quick action as needed

I. What pattern of structure should be developed on your campus?

1. Governance and responsibility by faculty with weak administration
2. Governance by representative organization (student, faculty or all-institution) with the administration carrying out its will. All other elements have no direct part in governance
3. Governance by president and administrative council upon consultation with a variety of sub-groups. Thus faculty, students and staff are in consultation but not in an ultimate decision-making role
4. Governance by president aided when desired by consultative groups consisting largely of faculty and administration. Students deal with student affairs.
5. Some other structure in which role and function are clearly established

J. What principles should apply as to who decides what?

1. Vote by faculty on all questions
2. Constituent organizations decide by majority vote of their members on all issues
3. President decides on all issues with consultation when and if he desires it

4. President decides all questions but accords strong consultative voice to particular interest-groups. However, decisions are made upon consideration of various reports and the president is held accountable.
5. Some other set of principles, rationally considered and stated

K. What role should your institution take in its capacity as property-owner in the community? (See Section VII on *Student Life* if you are particularly interested in this aspect of institution-community relations).

1. Institutional affairs are of no concern in the community. Community affairs are of no concern to the institution.
2. Major relationships should arise in connection with the interest the community may take as the campus fits into local zoning ordinances.
3. The institution should act in an advisory capacity in community government in matters where its property ownership may be involved (e.g. city planning, traffic controls and safeguards, zoning, etc.)
4. There should be a formal sharing of power in decision-making as to areas that concern the community and the institution as property owner.
5. The institution should be required to present for approval all plans for new land use to the proper local authority.
6. The institution, as an agency of the state, should exercise the right of eminent domain as needed for its development.
7. Institutional planning on land use should, as a matter of policy, be decided cooperatively with local or city planning authorities.
8. Some consistent combination of these
9. Some other institutional role

L. What should be the role of your institution as employer apart from faculty and administrative personnel?

1. It should follow its own policies of employment totally independent of local, regional or state policies.
2. It should treat its staff-employees as general state civil service employees.
3. It should attempt to articulate its employment policies with those generally practiced in the state or community.
4. It should arrange different employment practices with its staff depending upon their function and responsibility.
5. Some combination of these

6. It cannot take any of these roles, voluntarily, as its employment procedures and policies are governed entirely by state agencies
7. Some other role

M. What, if any, should be the role of the governing body* in the internal affairs of your institution and the role of your institution in the internal affairs of the governing body? (See Reference 2)

1. The governing body should delegate authority to the decision-making organization of the institution as long as the responsibility so delegated is satisfactorily discharged.
2. The governing body should seek formal reports and/or complaints from interested constituents of the institutional community and deal with these through proper channels at the institution.
3. The governing body should be open to presentation of constructive suggestions or grievances through formal channels at regular meetings.
4. The governing body should include student, faculty or other institutional representatives as regular participating members.
5. There should be an advisory council to the governing body consisting of elected representatives from all-institutional constituencies. This council should be the channel for direct communication with the governing body.
6. There should always be easy access to members of the governing body individually and/or regular meetings so that any member or group of the institution can be heard.
7. Some consistent combination of these
8. Some different relationship

N. How should change in the desired direction be achieved in your institution? (See Section IX on *Planning for Improvement*)

*The term governing body may refer to boards of trustees, board of directors, or regents or other multi-member publicly appointed governing bodies.

V. STUDENT ACCESS

Several issues are raised in this very contemporary and complicated area. The first deals with the question of who actually is "invited" and most likely to attend and succeed on your campus at the present time. The second issue asks whether you think there should be other kinds of students to whom access should be made more open in your institution, and if so, what groups they should include. Issues C — E present some questions as to particular means that might be adopted or adapted to bring a new concept of access into actuality on your campus. You will notice that some of these alternatives go with certain directions you may have selected earlier. In addition to these questions, several general problems of current concern in this area are raised in Issues F — H. Issues I and J point up the dilemma of who should decide on policies of student access and how these policies and practices can be subjected to constructive evaluation and ongoing improvement through good planning procedures.

In studying these Issues and Alternatives your Commission believes that you will want to consider the fact that not all individuals desire or need or can use the same kind of education. There should be made available a number of different forms of higher education beyond the high school level if we are to truly open access for students in terms of their particular interests and capacities. It follows, then, that each institution needs to identify the educational experiences it can and should provide and to open wider the door to those who may profit from these experiences. You will want to be especially sensitive to the "givens" of your institution, its community, its goals and its life-style in order to think and plan realistically about desirable policies and procedures for student access to your institution.

A. Which, if any, of these statements most accurately describes the kinds of students to whom your campus *is* now readily accessible?

1. To all who qualify defined in some or all of the following ways: high school diploma or equivalency, specified rank in high school graduating class, a diploma or acceptable transfer credit from another institution of higher education some specified minimal score on standard entrance exams, etc.
2. All those qualified as defined above who are in-state applicants through lower tuition rates than those charged to out-of-state applicants or absolute quotas for out-of-state applicants

3. To the conventionally qualified student because the program, curriculum and instruction are geared to applicants with this experience
4. To any applicant with the necessary funds and willingness to try the existing programs offered
5. To any applicant willing to try and with financial aid provided to support his efforts
6. To any applicant willing to try and with both financial aid and support of tutorial help and flexible curricular arrangements
7. To any applicant willing to try and judged likely to succeed (using indicators more widely defined than the conventional ones and also using success standards other than just academic achievement)
8. To any applicant who is a graduate from any two-year post-high school educational institution
9. To any qualified applicant with certain criteria defining "qualified" and suggesting proper placement procedure established in your own institution from certain specified post-high school education institutions
10. To other groups of applicants because of some different admission policy or arrangements
11. To some combination of the sorts of students described above

B. In which, if any, of the following directions *should* your institution be moving to assure greater or more open access?

1. Towards really open access for all promising and highly qualified applicants regardless of any other considerations, such as geographic, cultural or racial background; extreme economic poverty, physical handicaps, etc.
2. Toward making access open to a much wider range of students with special preference for a particular "mix" of those with certain cultural, racial and/or economic backgrounds, geographic or national origin, greater maturity, etc.
3. Toward easier access for students whose interests and abilities are less oriented to the conventional academic or career goals and are more oriented to service, to the performing arts, etc.
4. Toward more open access for applicants who might fulfill particular job-market needs of the region you serve.

5. Toward open access for students defined in some other "mix," breadth or depth of interest so that applicants with those particular backgrounds, interests and qualifications would find your institution really more accessible
6. Toward some consistent combination of these directions for more open access at your institution
7. The present policy of student access is satisfactory
8. In some other directions

C. Which, if any, of the following policies and procedures for admission and placement would be most helpful in such a shift? (if you see a need for a shift at all)

1. Admissions policies based on higher scores or more selective entrance exams, higher rank in high school graduating class or from transfer institutions than is current practice. Evaluation of previous experience based on the quality of the applicant's academic work. Placement of student in program or level of work in accord with this evaluation.
2. Very flexible admission policies with varying entrance standards to accommodate applicants who are being especially encouraged to enter the institution. Evaluation of previous experiences based on, but certainly not entirely on, academic achievement. Possible placement in individualized learning situation according to the needs and interest of the applicant.
3. Admission policies changing as job needs change emphasizing those abilities and interests most consistent with the career programs as they are introduced or expanded. Evaluation of previous experience could include work experience in addition to, or instead of, customary academic work, grades, scores, credit, etc. Placement in terms of proven proficiency.
4. Admission policies based on those criteria appropriate to the encouragement of the particular kinds of student interest and performance desired and varying in terms of that particular area. For example, evaluation for placement and/or transfer credit for the service-oriented student would be different from that for the arts-oriented student.
5. Any consistent combination of these, clearly published and carefully followed, so that the student's own choice would be the most important factor in access
6. Some other policy on admission and placement, so as to redirect the emphasis or meaning of "openness" of access

D. What, if any, of the following kinds of instructional and curricular guidelines would be most helpful if you have defined as desirable some change as to student access to your campus? (You will probably notice that some of these alternatives fit some of the direction-shifts you may have chosen in Issue C)

1. Upgrading the academic strength and teaching abilities of the faculty so that instruction would be increasingly challenging and scholastically and aesthetically productive. Curricular change would be toward arrangements that stimulate curiosity and efforts of the students. Creative teaching would take into account variety of background and interests.

2. Curricular structure arranged so that success and achievement would be gained in ways other than, or in addition to, the usual academic course arrangements. Individualized and programmed instructional techniques, tutorials, etc. would be used—especially in the student's first year or two. Evaluation and grading procedures might have to be re-examined on the basis of any major redefinitions of "achievement."

3. Curricular arrangements more career-oriented. General education requirements, if any, would be reduced and liberalized. Specialization would begin earlier in the student's college career. Excellence of instruction would suggest efficiency of use of student and faculty time. Programmed learning would be employed in basic skill and fact teaching. Credit would be given for job experience, before, during or interrupting the "normal" college career.

4. Curriculum oriented less directly toward career education and more toward general education and breadth of possible learning experiences. A wide elective choice should be open to students with a generous interpretation of ways credit could be earned or success and achievement rewarded. (performance in arts, work-experience, athletics, campus service, etc.)

5. Some combination of these. Great care would have to be exercised so that contradictory policies were not at work in curricular development and instructional improvement.

6. Some other curricular and instructional approaches designed to carry out a particular concept of "open access."

E. Which, if any, of the following ways of allocating financial support would be most helpful in achieving whatever goals of increased student access you believe should exist on your campus?

1. Allocation of financial support as it is operating at present
2. Financial aid, on the basis of financial need, outstanding qualifications and demonstration of achievement in intellectual and/or aesthetic areas. Extra funding should be developed for honors program, programs for independent study and research, etc. Institutions which select this as a major direction would have to seek additional financial support. (See Section VI on *Finance*)
3. Financial support allocated institutionally and/or to the individual students on the basis of demonstrated instructional and/or financial need (either student, institution, or—frequently—both). Extra and generous financial support should be available to insure small classes, technological equipment for individualized learning centers, special guidance and counselling services, etc. Reciprocal tuition agreements or graduated tuition rates favoring whatever group is being especially encouraged should be considered.
4. Special financial expenditures on institutional research to provide data cn job-market and employment needs and the particular student-qualifications needed for these (See Tables 5a and 5b). Provision may be needed for speedy and efficient ways of translating such data into modified admissions policies, program offerings, job placement, etc.
5. Financial support as needed to students with the special interests and/or abilities (service, athletics, performing arts, etc.) and to the specialized faculty, equipment and resources necessary for these.
6. Financial aid to the institution or to the students or both for necessary human and other resources, allocated on the basis of some consistent combination of these.
7. Funding to provide necessary support for the opening of access as it may be defined on your campus in ways differing from any of the above.

F. What should be the policy of your institution toward greater access for physically handicapped applicants?

1. They should be admitted when qualified by the conventional definition regardless of their handicap.

2. They should be admitted when qualified, and every facility possible should be provided to minimize the effect of their handicap and maximize their achievement.
3. They should be admitted to your institution only if it is one designated in the state (region) to provide the necessary equipment and personnel for handling the physically handicapped.
4. They should be admitted to your institution only if it is designated and funded to provide the necessary equipment and personnel. In addition provision should be given so that access is not limited by distance from the institution nor by expenses necessary for any special care.
5. It depends on the severity of the handicap. They should be admitted if the disability is such that your resources can accommodate them fairly readily.
6. They should be admitted on flexible admission policies if their artistic or service interests and abilities are promising.
7. They should be admitted under any circumstances, if they show any promise of success. They should be afforded special facilities or equipment they may need.
8. Some other policy should prevail in your institution.

G. As a general principle, how should your institution handle out-of-state applicants?

1. On a quota system
2. Reciprocity agreements with states in your region
3. Equal tuition for all regardless of place of residence
4. Inter-state compacts to pay for differential in tuition charged for students who need a program not provided in their home state (e.g., WICHE)
5. Students' residence and tuition dependent on their actual place of residence
6. Some consistent combination of these
7. Some different arrangement

H. If the matter of more open access, however defined, is seen on your campus as possibly leading to an undesirable lowering of standards, which, if any, of the following would help to counteract or minimize this effect?

1. Careful articulation with other schools (high schools, junior/community colleges, technical schools, etc.) so that admissions, transfer, evaluation of transcript or other experiences, placement and criteria for achievement are

made clear both among institutions and their student body. This would also apply to business or industry in the area with which work-study relations might be established, as well as any community groups or agencies affected.

2. Planning ahead for when and how the non-traditional student may be moved into the stage of education (general, career, etc.) where he can begin to succeed at the usual or desirable institutional standards.
3. Establishment of minimal achievement to be required in all areas while creating various paces and procedures for accomplishing these without sacrificing the benefits of a more open access policy.
4. Establishment of special quidance and placement arrangements to encourage students to "stop off" or to move into a job or career or to another institution if this seems in their best interest.
5. Establishment of some fixed maxima for credits that can be gained and counted toward a degree through non-conventional and sometimes non-academic experiences, pass-no pass options and other pressure-easing devices that may be adopted to make access more open.
6. Careful examination and development of other means which may be used more appropriately to judge and reward achievement beyond the usual grading system to be certain that the criteria on which they are based do reflect some clear-cut standards of excellence. For example, in granting credit for an instrumental recital, where letter grades might be meaningless, the possibility of "A for effort" would thus be lessened.
7. Some combination of these
8. Other preventive or precautionary measures built in as principles or techniques and as a planned part of any new approach to more open access

I. **Who should decide about the policy to be followed in reference to opening or widening student access on your campus? (See Section IV on *Governance and Organization.*)**

1. The state, as chief funding agent, through legislature, governing bodies and central planning agencies
2. The president and/or administration in consultation with others on campus
3. All-institution committees advising the president
4. Student-faculty committees advising the president

5. The present student body through its organization or by direct ballot
6. Faculty, student or all-institutional organizations
7. The federal government
8. The region or community
9. Some combination of these
10. None of these. There should be no institutional policy except that of selection and competition on the part of the clientele.

J. **What procedures should you use on your campus for ongoing consideration, evaluation and planning to achieve wider access by people wanting to attend your institution? (See Section IX,** *Planning for Improvement.)*

VI. FINANCE

This area differs significantly from other sections in that to raise a question as to "what you think would be best for your institution" is not a very realistic approach. Most of us would like to have a situation of nearly unlimited funds and unlimited authority for their use. Your Commission has long since recognized that this is a totally unrealistic expectation. It will, however, continue to address its concern to the overall problems and will recommend policies as to finance and resource allocation in light of the "possible and the desirable."

The most productive questions for your consideration revolve around one rather basic fact: state colleges and universities are, as institutions, more dependent on public financial support than many other institutions of higher education. In 1966, for example, the average source of funding was about 38% from student and parental support, 53% from state support, 5% from the federal government, and the rest from other sources. The major problems raised here deal with genuine possibilities as to what your institution can and should do within the realities of the financial situation. These down-to-earth questions are raised in the issues to follow: A and B point up the hard question of how state and federal funds are—and are likely to be—made available for use. Issues C and D invite you to consider how and by what means it may be possible to make the best use of these funds in terms of your institution's goals and aims. In Issues E and F we look at other ways of supplementing state and federal funds, as these might be most appropriate to your institution and at ways of making better use of whatever funds there may be available. The final issue directs your attention to ways of planning for improvement in the whole matter of finance, budgeting and use of funds in your institution. It is, of course, expected that the alternatives you choose or invent will be influenced by the particular ways in which your institution is funded and the form of control that exists in your state. It will be embarrassingly obvious from a study of these issues that there are severe and very real pressures in terms of financial support which must be borne in mind as you consider the alternatives to issues raised in other sections. You may very well be reimpressed with the urgent need for thinking in terms of priorities among the more and the less pressing aspects of curriculum, instructional improvement, more open access and the like.

A. **Suppose there is a substantial increase in the proportion of federal support for your institution. In what ways should these funds be made available for your use?**

1. Direct support, similar to that already available for certain instructional programs at junior/community colleges, in which financial aid is given for instructional programs deemed of particular worth
2. Aid-to-students (as direct grants to students from low-income families), student work-study grants (also directed to low-income students) and National Defense Student Loans (subsidized loans, with repayment and forgiveness features, applying especially to low-income students)
3. Project grants to institutions for some project regarded by a federal agency as worthy of study, experimentation or expansion
4. Categorical aid provided for a certain type of program or student, based on what a federal agency sees as worthy of support
5. Facilities aid providing direct financial support for physical plant and equipment
6. Institutional aid with direct financial aid granted to institutions on basis of an enrollment formula
7. Voucher systems in which the government provides students or their families with vouchers redeemable for tuition payments
8. Revenue-sharing in which federal revenues are sent back to the state and then administered by it to institutions of higher education
9. Some other delivery system combining some of these
10. Some entirely different system for delivering federal support; for example, a system similar to that used in the Morrill Act: (See Reference 7)

B. **Suppose the state continues or increases its support to your institution. What new forms are presently in operation or seem likely in your state?**

1. The customary allocation through state budget and/or planning bureaus
2. State aid to students
3. Direct assistance through tuition rebate or direct grants to students
4. State project grants (similar to federal grants) on the basis of needs or plans derived by a state planning agency

5. Sharing of federal funds administered through usual state channels
6. Some other form characteristic to your state

C. **Assuming the above or similar forms of federal and state aid to your institution are available, which seem most *desirable* for your institution?**

1. Direct grants-in-aid (state and/or federal)
2. Direct support by federal government on basis of need and direction as seen by the federal agency
3. Federal or state direct grants-to-students
4. Categorical aid
5. Sharing of federal funds
6. Institutional aid
7. Some combination of these
8. Some other possibility already devised or at least proposed in your state or region
9. No federal aid, because it carries with it the threat of federal control

D. **Assuming an increasing or at least no decrease in the amount of both federal and state aid, what principles would be most helpful regarding the distribution of such aid?**

1. General principle of dispersing funds directly to students or their families so they can choose where to go to college. Perhaps lower-middle income groups should be reached as well as the lower income groups
2. General principle that when institutional grants are made, the use of funds be proposed by the institution and the efficient use of the funds be checked by federal or state government so as to maintain both institutional autonomy and accountability
3. Student grants, voucher system, etc. allocated on basis of need and to lowest income groups
4. Any form of aid arranged so that it could be used for research in the institution
5. Principles governing distribution of aid should enable institutions to improve the overall excellence and challenge of its offerings
6. Funds distributed to allow institutions to decide which groups should be favored in open access policies
7. Institutional support granted, either by state or federal government, to emphasize career education
8. Some consistent combination of some of these
9. An entirely different set of principles

E. Assuming that an increasing percentage of the financial support for your institution must be found apart from federal and state funds, what are the most promising sources?

1. Increased tuition rates for all students
2. Increased tuition rates for out-of-state students
3. Major costs borne by students but aided by some borrowing plan such as the "Ohio" or "Yale" plan (See Reference 5)
4. Fund raising program which solicits support from private persons, companies, grants, alumni, parents, foundations, etc.
5. Some combination of these
6. Some other source

F. Which, if any, are desirable ways for more efficient use of whatever funds are available on your campus to move in the directions you have decided you should move? (You may want to refer back to Sections I, II, III, and V)

1. Fewer years of instruction for degrees. For example, three instead of four.
2. Removal of learning situations from the campus to community, industry, business, internship programs, home study, etc. The "University Without Walls" concept is an example which would presumably reduce the campus facilities needed.
3. Fuller utilization of space each day, each week, each year
4. Greater use of technological aids and/or lower-paid staff for teaching of certain subjects or types of content and skills
5. Improved management procedures including close accountability for expenditures by program and quantified output. These may be either by institutional innovation or required by the funding agency.
6. Budgetary review which could result in economies
7. Substitution and/or reduction of programs rather than expansion
8. Increasing budgetary control by state government. This suggests a need for institutions to analyze costs by student, by program, by division, etc.
9. Initiative by an institution to develop cost-effectiveness studies. One of the possible advantages of this would be the use of institutional criteria to judge effectiveness instead of externally established criteria.
10. Resource-sharing to avoid undue duplication of facilities

and personnel. The feasibility of this might well depend upon the geographic area and the number of institutions nearby with "shareable" resources.

11. Drastic reduction of student population. This would result in a reduction of faculty and the building of new colleges or new institutional facilities.
12. Some combination of these which would facilitate or at least not seriously threaten the fulfilling of institutional goals in the priority designated
13. None of these is feasible. Different techniques must be devised to meet the cost squeeze in public higher education

G. What procedures should you use for continued study, evaluation and improvement of the question of achieving financial support and allocating resources on your campus? (See Section IX, *Planning for Improvement.)*

VII. STUDENT LIFE

The Issues and Alternatives in this section reflect the thinking of a representative group of students who attend state colleges and universities. They were requested by your Commission to report on the questions they found of most concern in student life on their own campuses. These concerns were recognized by the Commission as some of the most crucial issues facing institutions today.

The first two issues deal with the proper roles of students in institutional governance. Issues C — K refer to some of the matters usually included in the concept of student personnel services. The next five issues (L — P) deal with other types of problems in the lives of students. The final issue (Q) raises questions as to the best means for continuing planning for improvement in student life on your campus.

A. To what extent *are* students now involved in the governance of your institution?

1. Student senate
2. Campus committees
3. Participation with faculty on all-institution committees, evaluations, etc.
4. Advisory board to an administrative council and/or president
5. Participation in governing bodies at the state level
6. Lobbying groups, local and/or state
7. Some combination of these
8. Other

B. What direction *should* your campus take as to the extent and kind of student involvement in governance? (See Section IV on *Governance and Organization)*

1. More power allocated to the student senate for governance of student affairs
2. Power allocated to a student senate for governance of the institution
3. Students elected as delegates to an all-institution organization governing entire institution
4. Clear-cut and consistent consultative and advisory roles to the president and administration especially on affairs pertaining directly to student life
5. Student representation on all committees in the institution
6. Greater activities by students in lobbying or working for

political reforms connected with your institution or for higher education in your state
7. Greater representation of students on state governing bodies
8. Some combination of these
9. A different approach to the extent and kind of student involvement in governance

C. **What role should your institution play in job placement for its students?**

1. Placement at graduation
2. Continuing placement
3. Career placement during college enrollment
4. Some combination of these
5. The institution should play no role
6. Some other role

D. **If placement should be a concern in your institution, how should it be handled?**

1. Through a central placement office
2. Through departments, schools and/or individual faculty
3. At the initiative of individual students, seeking help where they can
4. Simply providing means for contacts with potential employers
5. Some combination of these
6. In some other fashion

E. **What should be the responsibility of your institution in helping students choose and prepare themselves for a particular career?**

1. To provide research and analysis of current and predicted future job markets and publication of these data for student use
2. To communicate and recommend to the student a career plan which will improve the possibilities of job placement at graduation
3. To establish programs and advisory procedures for students to facilitate transfer from one to another "career cluster"
4. To establish general priorities of job availabilities with realistic quotas for accepting students into various related instructional programs
5. Some combination of these
6. The institution bears no major responsibility for this task
7. Some other way of fulfilling this responsibility

F. **What should be the role of the counselling center for the students at your institution?**

1. To assist students to be more effective in their relationships with others
2. To provide academic guidance and help
3. To assist individual students and groups in gaining self-understanding and acceptance
4. To assist individuals in developing and improving both academic and social skills
5. To provide support during periods of emotional crisis
6. To help students relate emotional well-being to physical health
7. To prepare students to meet and harness planned and unplanned change
8. To encourage or to teach skills in the art of personal decision-making
9. Some combination of these
10. Some others

G. **With what responsibilities should your institution be charged regarding student housing both on and off-campus?**

1. Total responsibility
2. *In Loco Parentis* attitude
3. Aid and support of a city housing code
4. Some combination of these
5. No responsibilities at all
6. Other responsibilities

H. **What forms of housing should your institution offer its students?**

1. Conventional dormitories
2. Co-ed dormitories
3. On-campus apartments
4. Housing for married students
5. Systems for securing off-campus housing
6. Some combination of these
7. Get out of the housing business altogether
8. Some other forms

I. **What financial aid programs should your institution employ? (See also Section VI on *Finance)***

1. Loan and grant aid through federal and/or state funding
2. Financial aid through employment opportunities
3. Institutional student financial aid

4. Voluntary contributions for student financial aid (Scholarships, etc.)
5. Some combination of these
6. Other sources

J. **How comprehensive should your institution's health service program be?**

1. Doctor or nurses only, with limited prescriptions
2. Infirmary
3. Contract with local hospitals and clinics
4. Drug, birth control and planned parenthood information
5. Psychiatric aid
6. Insurance programs
7. Some combination of these
8. Other services and supports

K. **Which of the areas listed above should the student personnel services program at your institution most immediately re-examine and improve?**

1. Helping with career guidance and job placement
2. Counselling and guidance
3. Student housing
4. Securing financial aid
5. Providing an adequate health program
6. Some combination of these
7. None of these, all are adequately handled
8. Others

L. **What should be the relationship between the community and your institution with respect to student life?**

1. Community participation in institutional planning and governance
2. Institutional concern and participation in community affairs
3. Mutual concern for each other's problems, activities and affairs
4. Active role of campus students in community affairs
5. Some combination of these
6. Mutual indifference
7. Other

M. **What would be the most desirable means for developing student-community relations on your campus?**

1. Establishment of committees with representatives from both community interests and the institution, including

faculty, students and administration

2. Unilateral agreements between administration, department and/or school or college, with the community, depending upon the relationship involved
3. Special liaison officer, not merely for public relations, to work with community groups as requested
4. Special committee or administrative officer charged with continuing study of ways in which the institution could serve the community articulating service programs and facilities as needed by the community
5. Some combination of these
6. None of these, merely informal means of relationship as needs or problems arise
7. Some other approach

N. How, if at all, should a campus code be established concerning the conduct of all members of the campus community (trustees, administrators, faculty, students and staff)?

1. Carnegie Commission recommendations (See Reference 3)
2. Self-determination by each group
3. By the administration
4. By the governing body
5. By an all-institution organization representing all segments of the campus community
6. No code of conduct
7. Some other means of establishing a code of conduct

O. What should be the attitude and policy on your campus toward intercollegiate athletics?

1. Heavy emphasis and support
2. Deliberate de-emphasis
3. Elimination of all intercollegiate programs
4. Balanced co-curricular and extra-curricular with equal emphasis on literary, dramatic, music, forensic and other activities
5. Greater emphasis on intramural and informal athletics with diminishing emphasis on intercollegiate athletics
6. Other

P. Of all the areas considered so far, which, if any, need most urgent attention and improvement on your campus?

1. Students in governance
2. Student-personnel services
3. Student-community relations
4. Establishment of behavior codes

5. Athletic policies
6. Others

Q. What procedure should your institution use for continued evaluation and improvement of the conditions of student life on your campus? (See Section IX on *Planning for Improvement.)*

VIII. QUALITY AND EFFECTIVENESS

Questions of quality and effectiveness enter into any phase of an institution's operation. For example, when you think about the proper arrangement of curriculum or of instructional approaches you will necessarily consider criteria and evaluative processes for judging the excellence of the curriculum or of instruction. But what is central in the present issue is the establishment of value-standards for *overall* institutional quality and the best means for assessing the effectiveness with which the institution is achieving these. It seems obvious to your Commission that the task we are facing here has to begin with the overall purpose, goals and scope of your institution, whatever these may be. Depending upon the nature of the purpose and goals of your institution as a whole, standards or criteria can be chosen to define what is meant by "quality" in the entire process. Attention to this whole matter must precede any thoughtful inquiry, especially in the last five issues in this section.

The first issue in the present section probes into the criteria and the means now used on your campus for judging its quality and effectiveness. The second issue asks what, if any, different criteria should be used. Issue C has to do with the indicators that might be used to show that your chosen criteria are or are not being adequately met. Once you have selected some of these as indicators, we inquire in Issue D into the means for using them to point out areas needing improvement. Issue E raises the question of who should be responsible for and involved in evaluating the quality of your institution's overall efforts. In the last issue your attention is directed to the ways of implementing change for improvement in quality and effectiveness at your institution.

A. What criteria and/or means *are now* used in your institution to judge quality and effectiveness?

1. Accrediting agencies and their criteria
2. High number of graduates placed in jobs or in graduate study
3. Success either in graduate study or in jobs
4. Alumni evaluation
5. Accountability procedures by state governing body or coordinating agency
6. Ratings by learned or scholarly organizations, in terms of their own criteria
7. Your institution's public image as shown in increased enrollment figures and/or higher qualifications of applicants
8. Your self-image based on a comparison with some prestige

institution, either private or public
9. Quality and quantity of research by faculty as indicated by prestige, informal accounts and/or institutional data and figures
10. High proportion of Ph.D's on the faculty
11. Quality and effectiveness of service of faculty in and out of the institution
12. Some combination of these
13. None of these
14. Other criteria

B. **What criteria and/or means *should be used* in your institution to judge quality and effectiveness, as defined in terms of its scope and goals?**

1. Same as those now used
2. Percentage of graduates placed in jobs related to each of their career programs
3. Percentage of graduates accepted in graduate programs satisfactorily completed
4. Quality and quantity of service rendered to community, state or nation by students, faculty and/or alumni
5. Degree of cooperative effort among all campus groups
6. Degree of personal responsibility accepted by both faculty and students in and outside of the campus community
7. Competence of graduates in their careers
8. Openness by students, faculty and administration to self-evaluation and improvement
9. Satisfaction of alumni as to the adequacy of preparation for their jobs
10. Satisfaction of alumni as to overall effectiveness of their college experience
11. Satisfaction of present students as to the relevance of their overall education to their own perceived goals, needs and interests
12. Satisfaction by faculty as to the opportunities afforded them to function in accord with their training, interests and strengths
13. Number of qualified students attracted to your institution
14. Number of different types of students attracted to and succeeding in your institution
15. Prestige of your institution as perceived by citizens of state, community, nation, region or members of the institution
16. Some combination of these standards or criteria—perhaps

arranged in some priority
17. Different criteria

C. Which, if any, of these *indicators* could properly be used to identify the degree to which these criteria of excellence are being reached? (Note that there are examples suggested here that could be quantitatively expressed—others are qualitative.)

1. Numbers and achievement of graduates in graduate study
2. Job-placement of graduates
3. Questionnaires for alumni and for their employers (achievements, evaluations, etc.)
4. Number of faculty publications, research and advanced degrees
5. Library holdings and use made of these
6. Personal evaluations solicited from faculty
7. Student evaluations designed to elicit judgments of overall effectiveness in terms of their career plans and personal goals
8. Quantity *and/or* quality of student-faculty-administrative committees and organizations
9. Kinds and quality of community services and/or involvement of students and faculty
10. Evidence of *rapprochement* among various on- and off-campus groups
11. Numbers of kinds of innovative procedures in curriculum and instruction both suggested and actually attempted
12. Comparison of student profiles over a period of years (in terms of academic, quality and achievement in terms of variety of students, or on other bases)
13. Comparison of student's profiles upon entrance and exit
14. Relative scholastic rank and ability of students entering your institution over a period of years
15. Inventories exploring reasons for students leaving college voluntarily over a period of years and analysis of quantity and quality of counselling involved in these exits
16. Some combination of these indicators
17. Others

D. If some of these or other indicators seem helpful, how could they be used to identify areas needing improvement on your campus?

1. Built-in evaluative procedures when new programs or innovation are undertaken
2. Planned inventories, surveys or studies of community,

state, regional and national needs conducted as a major research commitment of your institution
3. Ongoing institutional research regarding job-markets for your graduates, as compared with job-placements (See Tables 4a-d and 5a-b)
4. Institutional research as to effectiveness of graduates in their jobs
5. Devising, distributing and evaluating inventories of graduates and the relationship between field of specialization and actual employment
6. Some combination of these
7. Other means

E. Who should be charged with the responsibility and/or involved in evaluation of quality and effectiveness at your institution? (Note the special relevance here of the concept of authority-responsibility developed in Section IV on *Governance.*)
1. Students
2. Alumni
3. Faculty
4. Administration, especially through expanded institutional research
5. Governing body or coordinating agency
6. Community
7. Some combination of the preceding
8. Accrediting agencies
9. Learned societies in academic disciplines or professions
10. The president, guided or in consultation with some of the preceding
11. Some planned arrangement of committee representing faculty, students and administration including, where needed, community and state-agency representatives
12. Federal agencies
13. Some consistent combination of these
14. Some other group or individuals

F. How can concepts, procedures and information designated here be used to implement improvement in the quality and effectiveness of your institution? (See Section IX, *Planning for Improvement*)

IX. PLANNING FOR IMPROVEMENT

The entire thrust of this paper, indeed of the whole National Project, is to encourage planning for improvement on each campus. Your Commission hopes that you have selected certain areas in which you are most concerned to plan for improvement. The issues brought up should be considered in relation to whatever areas are of special concern to *you*

The first two issues inquire into the ways which planning does occur and *should* occur on your campus and the matter of *who* should carry the responsibility of planning for improvement. Issues C and D (recognizing that our institutions do operate in some relation with state or federal governments) raise questions as to cooperative aspects of planning for improvement. The next three issues (E — G) concern means and techniques for planning, the conditions for implementation of plans and evaluation of the results of efforts at improvement. Issue H raises one of the most significant questions of all in the view of your Commission: what future contribution should AASCU make to encourage and support planning for improvement on your institution?

A. **What arrangements are there on your campus for planning for improvement?**

1. The administration and/or the president
2. An educational development office or officer
3. Faculty-administrative *ad hoc* committees
4. Master-planning by professional consultants
5. All-institutional standing committees
6. State coordinating and/or governing agency
7. Area or regional planning bodies
8. Many different groups working cooperatively
9. Many different groups cooperating independently sometimes in totally different or in overlapping directions
10. No systematic arrangement for planning
11. Other arrangements

B. **What arrangements *should there be* on your campus for planning for improvement?**

1. Use of students, faculty and administration on campus planning committee or team
2. Use of students, faculty, administration and representatives of interested citizens and the governing body or coordinating agency
3. Faculty organization or subcommittee thereof
4. Student organization or subcommittee thereof

5. All-institutional organization or subcommittee thereof
6. The president and administration in regular consultation with representatives of the constituent elements
7. *Ad hoc* committees consisting of some type of all-institutional representation
8. Master-planning by professional consultants
9. State governing body or coordinating agency
10. Initiation could come from interested student groups, faculty, department or from the community and channelled to whatever planning unit there may be
11. Through a cooperative arrangement with representatives from other institutions of higher education in state, locality or region
12. Some consistent combination of these (it should be noted that use of certain of the above would preclude or severely limit others)
13. Some other arrangements

C. **Considering the particular planning agencies and patterns in your state, what would be desirable ways for your institution to take a more active part in those aspects that relate planning to your institution?**

1. Promote greater opportunity for the institution to study and recommend plans that would fit into an overall state pattern
2. Establish more effective working relationships (through cooperative committees, conferences, advisory boards, etc.) between the institution and those state agencies which conduct state-wide planning for higher education
3. Develop consultative boards or councils (consisting of representatives of your institution, citizens, state agencies, etc.) to advise planning boards
4. Create *ad hoc* committees for specific planning when changes are necessary
5. Some consistent combination of these
6. Other ways
7. Present conditions in the state do not allow for any participation by your institution in long-range planning

D. **Recognizing the changing role of the federal government in the funding of higher education, what forms of cooperative planning are desirable within your institution?**

1. Soliciting of funds delivered in such a way as to preserve a maximum of institutional autonomy and cooperative work with other institutions

2. Evidence of willingness to coordinate plans within a particular region where many institutions, citizens and students have vested interests in the results
3. Development of institutional offices or committees charged with the responsibility for liaison with federal funding agencies
4. Including in plans for use of federal funds for innovation recognition and the means for reasonable ways of showing accountability
5. Some combination of these
6. Other forms

E. Which, if any, of the following techniques, systems and models would be helpful on your campus as it plans for improvement? (See Reference 12)

1. Use of computer simulation models
2. Development of "futures-forecasting" procedures to determine society's needs.
3. Long-range institutional and program planning based on institutional "output" data (job-market, manpower projections)
4. Long-range institutional and program planning based on "input" statistics such as census data, student-population-prediction profiles and in terms of the student-mix desired by your institution (See Section V on *Student Access.)*
5. Application of the Delphi Technique to elicit and/or refine group judgments
6. Techniques such as "Delphi-future histories," "Scenarios," "Value-shift analysis," "Future-history analysis," "Cross-purpose-cross-impact matrices," "PERT," etc.
7. Some consistent and efficient combination of these
8. Other techniques, systems or models

F. What, if any, of the following conditions would encourage implementation of plans for improvement once they have been designated for your campus?

1. A climate of mutual understanding and agreement as to the distribution of authority and responsibility in relation to patterns of governance and consultation
2. Honest and sympathetic leadership by the unit or person of authority
3. Recognition and consideration (by whoever makes plans for change) of the existing mood, human and physical

resources and the undue burden or overuse of any kind of resource

4. Intentional effort made in plans presented to phase-in changes so that the "culture-crash" is minimized
5. Avenues established and utilized for communication of plans and reasons for them with the possibility built in for human feedback as well as data feedback
6. Cooperative relations established and maintained not only among members of the institutional community but also between it and its publics
7. Some sort of "machinery" established for channelling ideas for change to the appropriate agent, committee, council, etc. where planning is the major responsibility
8. Some combination of these
9. Other conditions

G. What kind of *timing* would be most effective on your campus in planning for improvement?

1. Continuing without interruption
2. Continuing but in terms of specified intervals
3. In five-year periods
4. In ten-year periods
5. With planned lulls to invite feedback, evaluation and "branching" activities
6. Timed to coincide with periods of greater or lesser fund availability
7. Continuous planning but breaking long-range plans down into shorter range units
8. Some combination of these
9. Some other timing procedure

H. On your campus, which, if any, of the following techniques or approaches would help in early evaluation to redirect efforts in achieving improvement?

1. Planning to include phases with built-in stages for evaluation and "branching" techniques
2. Clear-cut identification of ends in relationship to means as part of the planning process
3. Use of any of the techniques discussed under Issue E which emphasize evaluation and redirection possibilities built into the structure
4. Planning based on short-term steps leading to long-range goals including at each stage evaluation, deliberation and, if neccessary, redirection

5. Some combination of these
6. Different approaches

I. **In addition to this present effort, what contributions should AASCU make to aid in planning for improvement on your campus?**

1. Developing and disseminating management-information systems
2. Act as a source for collecting and distributing descriptions of ongoing plans at member institutions and related evaluations
3. Provide for or encourage regional or state workshops for sharing of information, ideas and cooperative planning
4. Solicitation of funds, both federal and private, to aid institutions in their efforts to plan for improvement
5. Continuation of the Commission or of its impetus
6. Some combination of these
7. Other contributions within the scope of AASCU

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A SUPPLEMENT

TO THE

ISSUES AND ALTERNATIVES

IN THE

FUTURE OF STATE COLLEGES AND UNIVERSITIES

A Digest of Reference
Material Compiled
for the
National Commission On
The Future of State Colleges and Universities

HE 003 021

American Association of State Colleges and Universities
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Introduction

The National Commission on the Future of State Colleges and Universities developed the Issues and Alternatives document to facilitate the implementation process of planning for change. The document should be of special interest to presidents of state colleges and universities, Campus Action Teams and institutional planners.

In an attempt to keep the Issues and Alternatives in the Future of State Colleges and Universities as short and uncluttered as possible, the supplement contains selected references, key figures and key tables which evidence the significance of specific problems addressed by some of the issues. Likewise, the references provide background information on several topics.

Footnotes in the primary document refer to references, figures or tables in this supplement. Although the special analysis of the recommendations of the Meyerson report, Carnegie Commission reports and the Newman report is not referenced in the original document, this comparison should enable Campus Action Teams to see what other groups have said about some of the issues and alternatives raised in the primary document.

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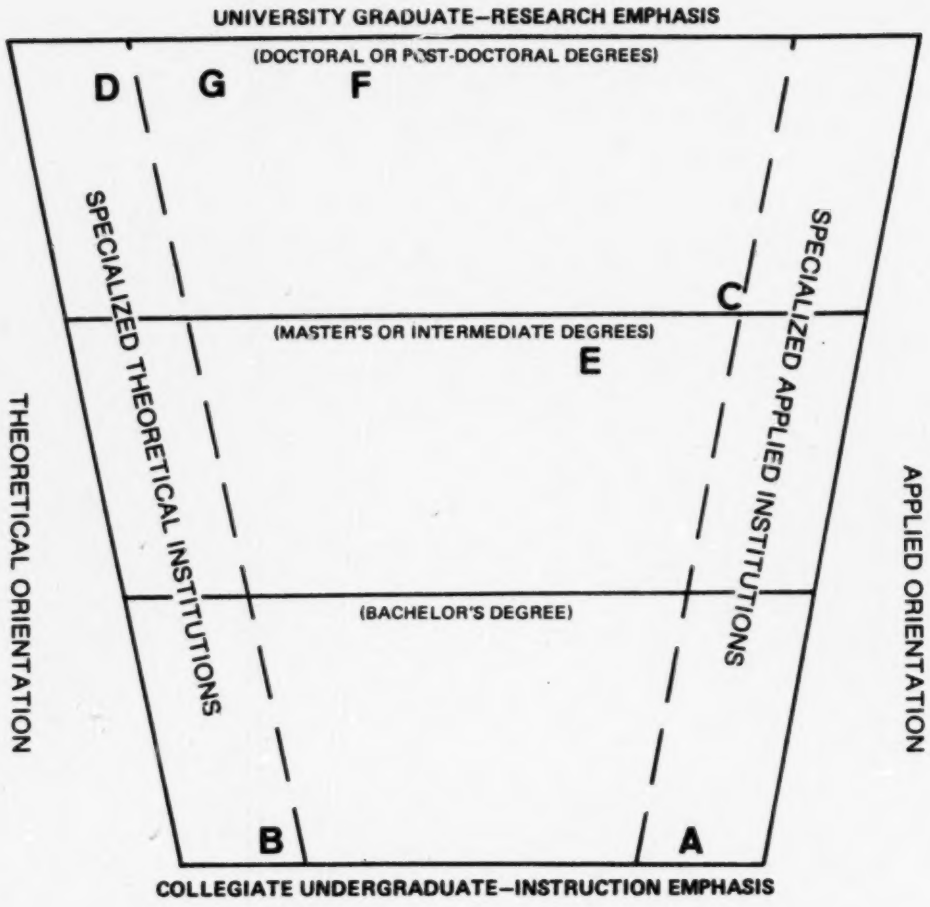
A Two-Dimensional Framework
for Classifying Higher Educational Institutions



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on a Two-Dimensional Framework
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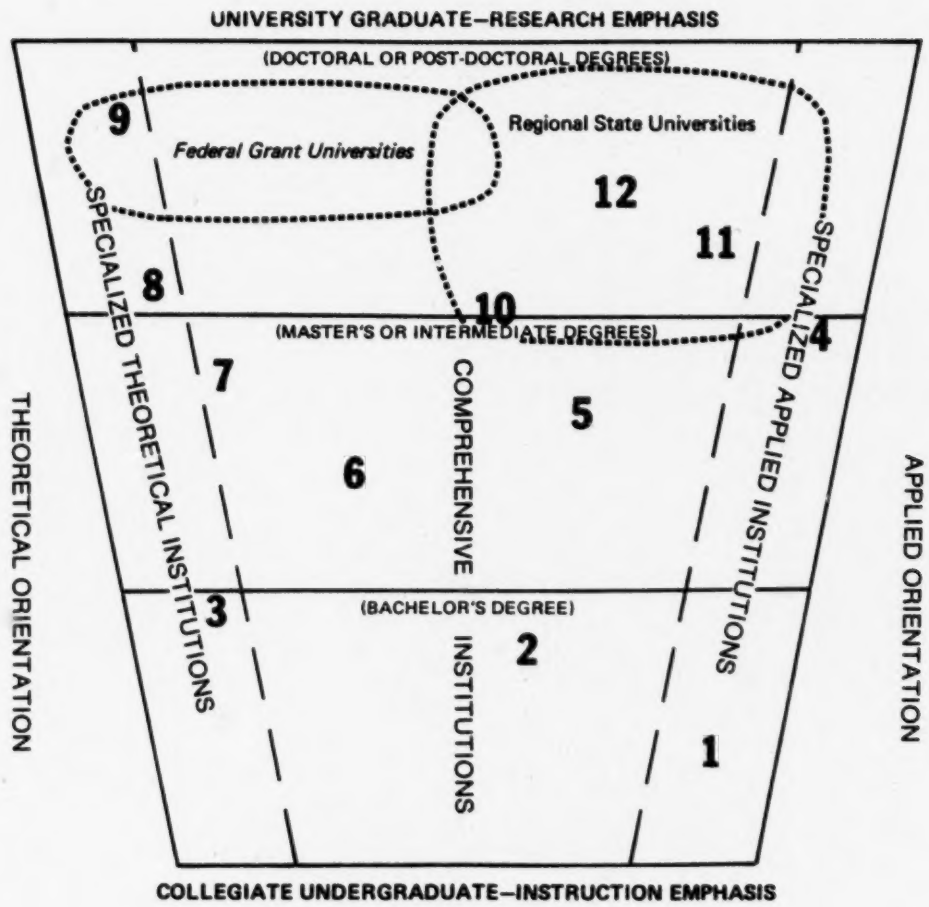

Figure 1. A Two-Dimensional Conceptual Framework for Classifying Higher Educational Institutions

Source: Fred F. Harcleroad, H. Bradley Sagen, and C. Theodore Molen Jr., The Developing State Colleges and Universities: Historical Background, Current Status, and Future Plans (Iowa City: American College Testing Program, 1969) pp 104-5

Table 2. Opening Fall Enrollment in U.S. Colleges and Universities 1968 and 1970, by Type of Institution

	1968			1970			% Change of Absolute Growth	1968-70 of Total
	Enrollment	% of 4-year	% of Total	Enrollment	% of 4-year	% of Total		
All Schools	7,554,558	--	100	8,548,073	--	100	+13.1	--
A. Two-year (pub. & pvt.)	1,796,426	--	23.7	2,214,484	--	25.9	+23.2	+ 2.2
B. Four-year								
1. Total	5,758,132	100	76.2	6,333,589	100	74.1	+ 9.9	- 2.1
2. Private	1,953,402	33	25.8	2,017,828	32	23.6	+ 3.2	- 2.2
3. Public-total	3,804,730	66	50.3	4,315,761	68	50.4	+13.4	+ 0.1
1. a.t Total SCUs	1,640,244	28.4	21.7	1,887,480	29.7	22.0	+15.0	+ 0.3
2. a.1 AASCU members[b]	1,491,123	25.8	19.7	1,730,851	27.3	20.2	+16.0	+ 0.5
3. a.2 Non-member SCUs[c]	149,121	2.5	1.9	156,629	2.4	1.8	+ 5.0	- 0.1
1. b.t Total NASULGC type	2,159,510	37.5	28.5	2,428,281	38.2	28.3	+12.4	- 0.2
2. b.1 NASULGC members	2,041,330	35.4	27.0	2,304,371	36.3	26.9	+12.8	- 0.1
3. b.2 NASULGC non-members[c]	118,180	2.0	1.5	123,910	1.9	1.4	+ 4.8	- 0.1
c. Municipal institutions	4,976	*	*					

Notes:

[a]Totals do not include enrollments for military service academies and the Canal Zone. Figures were adjusted from USOE data to correct a few evident errors, e.g., schools misclassified by level or control.

[b]Includes data from all schools which were AASCU members as of January, 1971, even though in 1968 some of these were not yet members.

[c]See attached lists.

SOURCES:

1968: Opening Fall Enrollment in Higher Education, 1968, U.S. Office of Education, National Center for Educational Statistics

1970: Enrollment by level and type from USOE over telephone; institutional figures from Advance Report on Opening Fall Enrollment in Higher Education, 1970, USOE, National Center for Educational Statistics

KEY:

AASCU American Association of State Colleges and Universities
NASULGC National Association of State Universities and Land-Grant Colleges

Table 3a. Actual and Projected Demand for New Elementary and Secondary School Teachers Compared With Number of College Graduates, 1963 to 1978

(Numbers in thousands)

Year	Total Teachers Employed	Number Required for Growth and Replacement	New Teachers Required[1]	Total Number of College Graduates[2]	New Teachers Required as Percent of Graduates
1963	1,806	209	157	444	35
1965	1,951	208	156	530	29
1967	2,097	222	166	591	28
1968	2,178	239	179	667	27
1969	2,225	209	157	755	21
1970	2,245	190	142-190	772	18-25
1973	2,286	189	142-189	859	17-22
1975	2,304	183	137-183	928	15-20
1978	2,334	187	140-187	1,029	14-18

[1]Figures for 1963-1969 represent 75 percent of the total number required for growth and replacement, with a conservative allowance for the numbers of teachers who returned to the profession. Since the return flow of experienced teachers may possibly decline during the 1970's, the ranges shown indicate the numbers and percents of new teachers that would be required with a return flow ranging from 0 to 25 percent.

[2]Includes bachelor's and first professional degrees awarded.

Source: Based on data from the Department of Health, Education, and Welfare, Office of Education.

Source: "Manpower Demand and Supply in Professional Occupations," a reprint from the 1970 Manpower Report of the President, U.S. Department of Labor, 1971. Page 171.

Table 3b. Special Approximations to Show Effect of Table Above on State Colleges and Universities.

Year	New Teachers Required as Percent of Graduates	SCU Percent of Total Graduates	Percent of SCU Graduates Prepared as Teachers	Percent of all Bachelors Prepared as Teachers by SCUs
Source	Table Above	Extrapolated from "Earned Degrees Conferred Study, 1968-69."		Col. 2 x Col. 3
Col. No.	1	2	3	4
1963	35	24.0	NA	
1965	29	26.0	NA	
1967	28	28.0	NA	
1968	27	28.5	NA	
1969	21	29.3	55.2[a]	16.2
1970	20[b]	30.0	55[c]	16.5
1973	19[b]	32.0	53.5[c]	17.1
1975	18[b]	33.5	52.0[c]	17.4
1978	16[b]	36.5	50[c]	18.2

[a]Education bachelors from Table D (Page I-2) (32.2%) plus estimated half of liberal arts graduates (21%) plus a few teaching bachelors in other professional fields.

[b]Range from table above rounded in conservative direction.

[c]Conservative extension

Table 4a. Bachelor Degree Summary by Type of Institution, 1968-69

Broad Field of Study	State Colleges & Univs.			Public Universities			Total Public			Non-Public			All Institutions	
	No. of Degrees	Vert. %	Horz. %	No. of Degrees	Vert. %	Horz. %	No. of Degrees	Vert. %	Horz. %	No. of Degrees	Vert. %	Horz. %	No. of Degrees	Vert. %
LIBERAL ARTS FIELDS														
Eng. & Journ.	16,427	7.6	27.6	18,901	7.8	31.7	35,328	7.7	59.3	24,228	8.8	40.7	59,556	8.1
Foreign Lang.	4,787	2.2	21.8	7,317	3.0	33.3	12,104	2.6	55.1	9,881	3.6	44.9	21,985	3.0
Philosophy	617	.3	10.1	1,204	.5	19.7	1,821	.4	29.8	4,297	1.6	70.2	6,118	.8
Religion	15	n	.3	98	n	1.8	113	n	2.1	5,163	1.9	97.9	5,276	.7
Humanities Total	21,846	10.2	23.5	27,520	11.3	29.6	49,366	10.8	53.1	43,569	15.8	46.9	92,935	12.7
Geography	1,728	.8	51.8	1,196	.5	35.8	2,924	.6	87.6	414	.2	12.4	3,338	.5
Psychology	6,686	3.1	22.6	9,814	4.0	33.3	16,500	3.6	55.9	12,995	4.7	44.1	29,495	4.0
Soc. Sci.	36,685	17.1	25.9	45,035	18.5	31.7	81,720	17.8	57.6	60,248	21.9	42.4	141,968	19.3
Soc. Sci. Total	45,099	21.0	25.8	56,045	23.0	32.1	101,144	22.1	57.9	73,657	26.7	42.1	174,801	23.8
Biology	8,293	3.9	23.3	12,794	5.3	36.0	27,087	4.6	59.3	14,469	5.3	40.7	35,556	4.8
Computer Sci.	231	.1	24.7	443	.2	47.5	674	.1	72.2	259	.1	27.8	933	.1
Mathematics	9,440	4.4	34.5	8,541	3.5	31.3	17,981	3.9	65.8	9,349	3.4	34.2	27,330	3.7
Physical Sci.	5,083	2.4	23.6	7,349	3.0	34.0	12,432	2.7	57.6	9,159	3.3	42.4	21,591	2.9
Science Total	23,047	10.7	27.0	29,127	12.0	34.1	52,174	11.4	61.1	33,236	12.1	38.9	85,410	11.6
Liberal Arts Total	89,992	41.9	25.5	112,692	46.3	31.9	202,684	44.2	57.4	150,462	54.6	42.6	353,146	48.1
PROFESSIONAL FIELDS														
Agriculture	1,788	.8	22.1	5,995	2.5	74.3	7,783	1.7	96.4	291	.1	3.6	8,074	1.1
Architecture	143	.1	4.3	2,519	1.0	75.6	2,662	.6	79.9	669	.2	20.1	3,331	.5
Bus. & Comm.	25,920	12.1	27.4	26,961	11.1	28.5	52,881	11.5	55.9	41,735	15.1	44.1	94,616	12.9
City Planning	37	n	25.3	109	n	74.7	146	n	100.0	0	0	0	146	n
Education	73,468	34.2	47.9	39,783	16.3	26.0	113,251	24.7	73.9	39,997	14.5	26.1	153,248	20.9
Engineering	6,141	2.9	14.8	22,419	9.2	53.9	28,560	6.2	68.7	12,993	4.7	31.3	41,553	5.7
Fine & Appl. Arts	7,857	3.7	24.8	10,287	4.2	32.5	18,144	4.0	57.3	13,496	4.9	42.7	31,640	4.3
Folklore	0	0	0	3	n	50.0	3	n	50.0	3	n	50.0	6	n
Forestry	215	.1	11.2	1 579	.6	82.2	1,794	.4	93.4	127	n	6.6	1,921	.3
Health	2,908	1.4	14.5	9,536	3.9	47.7	12,444	2.7	62.2	7,560	2.7	37.8	20,004	2.7
Home Econ.	1,882	.9	20.7	5,099	2.1	56.2	6,981	1.5	76.9	2,094	.8	23.1	9,075	1.2
Law	76	n	18.3	248	.1	59.8	324	.1	78.1	91	n	21.9	415	.1
Library Sci.	712	.3	71.2	213	.1	21.3	925	.2	92.5	75	n	7.5	1,000	.1
Military Sci.	96	n	5.1	73	n	3.8	169	n	8.9	1,726	.6	91.1	1,895	.3
Records Mgmt.	6	n	4.4	36	n	26.5	42	n	30.9	94	n	69.1	136	n
Trade & Indus.	1,861	.9	43.6	1,329	.5	31.1	3,190	.7	74.7	1,079	.4	25.3	4,269	.6
Gen. Curriculum	1,703	.8	17.9	4,725	1.9	49.6	6,428	1.4	67.5	3,099	1.1	32.5	9,527	1.3
Professional Total	124,813	58.1	32.7	130,914	53.7	34.4	255,727	55.8	67.1	125,129	45.4	32.9	380,856	51.9
Grand Total	214,805	100.0	29.3	243,606	100.0	33.2	458,411	100.0	62.5	275,591	100.0	37.5	734,002	100.0

Table 4b. Masters Degree Summary by Type of Institution, 1968-69

Broad Field of Study	State Colleges & Univs.			Public Universities			Total Public			Non-Public			All Institutions	
	No. of Degrees	Vert. %	Horz. %	No. of Degrees	Vert. %	Horz. %	No. of Degrees	Vert. %	Horz. %	No. of Degrees	Vert. %	Horz. %	No. of Degrees	Vert. %
LIBERAL ARTS FIELDS														
Eng. & Journ.	2,149	4.8	23.1	3,790	4.7	40.7	5,939	4.7	63.8	3,373	4.9	36.2	9,312	4.8
Foreign Lang.	479	1.1	9.5	2,369	2.9	46.9	2,848	2.3	56.4	2,202	3.2	43.6	5,050	2.6
Philosophy	27	.1	3.9	304	.4	43.7	331	.3	47.6	364	.5	52.4	695	.4
Religion	7	n	.3	18	n	.6	25	n	.9	2,859	4.1	99.1	2,884	1.5
Humanities Total	2,662	6.0	14.9	6,481	8.0	36.1	9,143	7.3	51.0	8,798	12.8	49.0	17,941	9.2
Geography	154	.3	27.4	325	.4	57.7	479	.4	85.1	84	.1	14.9	563	.3
Psychology	921	2.1	22.9	1,748	2.2	43.6	2,669	2.1	66.5	1,344	1.9	33.5	4,013	2.1
Soc. Sci.	3,236	7.3	14.3	10,512	13.0	46.2	13,748	11.0	60.5	8,992	13.0	39.5	22,740	11.7
Soc. Sci. Total	4,311	9.7	15.8	12,585	15.6	46.1	16,896	13.5	61.9	10,420	15.1	38.1	27,316	14.1
Biology	1,155	2.6	20.1	3,218	4.0	55.8	4,373	3.5	75.9	1,392	2.0	24.1	5,765	3.0
Computer Sci.	8	n	.8	512	.6	50.6	520	.4	51.4	492	.7	48.6	1,012	.5
Mathematics	1,344	3.0	23.5	2,539	3.1	44.3	3,883	3.1	67.8	1,840	2.7	32.2	5,723	2.9
Physical Sci.	804	1.8	13.6	3,089	3.8	52.3	3,893	3.1	65.9	2,018	2.9	34.1	5,911	3.0
Sci. Total	3,311	7.4	18.0	9,358	11.6	50.8	12,668	10.1	68.8	5,742	8.3	31.2	18,411	9.5
Liberal Arts Total	10,284	23.1	16.2	28,424	35.1	44.6	38,708	30.9	60.8	24,960	36.2	39.2	63,668	32.7
PROFESSIONAL FIELDS														
Agriculture	44	.1	2.6	1,642	2.0	96.6	1,686	1.3	99.2	13	n	.8	1,699	.9
Architecture	0	0	0	270	.3	46.6	270	.2	46.6	309	.4	53.4	579	.3
Bus. & Comm.	2,684	6.0	13.9	6,581	8.1	33.9	9,265	7.4	47.8	10,133	14.7	52.2	19,398	10.0
City Planning	0	0	0	408	.5	70.0	408	.3	70.0	175	.3	30.0	583	.3
Education	27,518	61.8	38.5	24,271	30.0	34.0	51,789	41.3	72.5	19,634	28.4	27.5	71,423	36.7
Engineering	1,077	2.4	7.1	8,495	10.5	55.7	9,572	7.6	62.8	5,671	8.2	37.2	15,243	7.8
Fine & Appl. Arts	1,230	2.8	16.6	3,581	4.4	48.3	4,811	3.8	64.9	2,603	3.8	35.1	7,414	3.8
Folklore	3	n	9.4	18	n	56.2	21	n	65.6	11	n	34.4	32	n
Forestry	18	n	4.8	302	.4	80.8	320	.3	85.6	54	.1	14.4	374	.2
Health	79	.2	1.9	2,391	3.0	58.1	2,470	2.0	60.0	1,646	2.4	40.0	4,116	2.1
Home Economics	205	.5	17.9	824	1.0	71.7	1,029	.8	89.6	120	.2	10.4	1,149	.6
Law	5	n	.6	97	.1	11.7	102	.1	12.3	728	1.1	87.7	830	.4
Library Sci.	937	2.1	15.8	2,837	3.5	47.8	3,774	3.0	63.6	2,158	3.1	36.4	5,932	3.1
Military Sci.	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Records Mgmt.	0	0	0	0	0	0	0	0	0	3	n	100.0	3	n
Trade & Indus.	85	.2	65.9	35	n	27.1	120	.1	93.0	9	n	7.0	129	.1
Gen. Curriculum	345	.8	18.7	735	.9	39.9	1,080	.9	58.6	762	1.1	41.4	1,842	.9
Professional Total	34,230	76.9	26.2	52,487	64.9	40.1	86,717	69.1	66.3	44,029	63.8	33.7	130,746	67.3
Grand Total	44,514	100.0	22.9	80,911	100.0	41.6	125,425	100.0	64.5	68,989	100.0	35.5	194,414	100.0

Table 4c. Doctorate Degree Summary by Type of Institution, 1968-69

Broad Field of Study	State Colleges & Univs.			Public Universities			Total - Public			Non-Public			All Institutions	
	No. of Degrees	Vert. %	Horz. %	No. of Degrees	Vert. %	Horz. %	No. of Degrees	Vert. %	Horz. %	No. of Degrees	Vert. %	Horz. %	No. of Degrees	Vert. %
LIBERAL ARTS FIELDS														
Eng. & Journ.	22	4.1	1.9	646	3.9	55.0	668	3.9	56.9	505	5.7	43.1	1,173	4.5
Foreign Lang.	0	0	0	350	2.1	46.7	350	2.0	46.7	399	4.5	53.3	749	2.9
Philosophy	0	0	0	103	.6	35.9	103	.6	35.9	184	2.1	64.1	287	1.1
Religion	0	0	0	9	.1	2.6	9	.1	2.6	337	3.8	97.4	346	1.3
Humanities Total	22	4.1	.8	1,108	6.6	43.4	1,130	6.5	44.2	1,425	15.9	55.8	2,555	9.8
Geography	0	0	0	97	.6	78.2	97	.6	78.2	27	.3	21.8	124	.5
Psychology	4	.7	.2	958	5.7	61.8	962	5.6	62.0	589	6.6	38.0	1,551	5.9
Soc. Sci.	17	3.2	.6	1,722	10.3	54.7	1,739	10.1	55.3	1,411	15.8	44.7	3,150	12.0
Soc. Sci. Total	21	3.9	.4	2,777	16.6	57.6	2,798	16.2	58.0	2,027	22.7	42.0	4,825	18.4
Biology	13	2.4	.4	2,243	13.4	73.5	2,256	13.1	73.9	795	8.9	26.1	3,051	11.6
Computer Sci.	0	0	0	25	.1	39.1	25	.1	39.1	39	.4	60.9	64	.2
Mathematics	7	1.3	.6	730	4.4	66.6	737	4.3	67.2	360	4.0	32.8	1.097	4.2
Physical Sci.	32	5.9	.8	2,529	15.1	65.6	2,561	14.9	66.4	1,298	14.5	33.6	3,859	14.7
Sci. Total	52	9.7	.6	5,527	33.1	68.5	5,579	32.3	69.1	2,492	27.9	30.9	8,071	30.8
Liberal Arts Total	95	17.7	.6	9,412	56.3	60.9	9,507	55.1	61.5	5,944	66.5	38.5	15,451	59.0
PROFESSIONAL FIELDS														
Agriculture	0	0	0	605	3.6	100.0	605	3.5	100.0	0	.0	0	605	2.3
Architecture	0	0	0	1	n	14.3	1	n	14.3	6	.1	85.7	7	n
Bus. & Comm.	12	2.2	2.3	376	2.2	70.5	388	2.2	72.8	145	1.6	27.2	533	2.0
City Planning	0	0	0	19	.1	76.0	19	.1	76.0	6	.1	24.0	25	.1
Education	385	71.6	8.0	3,253	19.5	67.3	3,638	21.1	75.3	1,191	13.3	24.7	4,829	18.4
Engineering	24	4.5	.7	2,126	12.7	63.0	2,150	12.5	63.7	1,227	13.7	36.3	3,377	12.9
Fine & Appl. Arts	9	1.7	1.3	431	2.6	63.0	440	2.6	64.3	244	2.7	35.7	684	2.6
Folklore	0	0	0	6	n	50.0	6	n	50.0	6	.1	50.0	12	n
Forestry	0	0	0	83	.5	88.3	83	.5	88.3	11	.1	11.7	94	.4
Health	2	.4	.7	220	1.3	77.7	222	1.3	78.4	61	.7	21.6	283	1.1
Home Econ.	10	1.9	9.8	86	.5	84.3	96	.6	94.1	6	.1	5.9	102	.4
Law	0	0	0	5	n	27.8	5	n	27.8	13	.1	72.2	18	.1
Library Sci.	0	0	0	8	n	47.1	8	n	47.1	9	.1	52.9	17	.1
Military Sci.	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Records Mgmt.	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Trade & Indus.	0	0	0	5	n	35.7	5	n	35.7	9	.1	64.3	14	.1
Gen. Curriculum	1	.2	.7	79	.5	57.3	80	.5	58.0	58	.6	42.0	138	.5
Professional Total	443	82.3	4.1	7,303	43.7	68.0	7,746	44.9	72.1	2,992	33.5	27.9	10,738	41.0
Grand Total	538	100.0	2.1	16,715	100.0	63.8	17,253	100.0	65.9	8,936	100.0	34.1	26,189	100.0

Table 4d. Bachelors, Master and Doctoral Degrees Conferred by State Colleges and Universities, 1968-69, by Instructional Fields.

Broad Field of Study	Bachelors			Masters			Doctoral		
	No. of Degrees	Vert. %	Horz. %	No. of Degrees	Vert. %	Horz. %	No. of Degrees	Vert. %	Horz. %
LIBERAL ARTS FIELDS									
Eng. & Journ.	16,427	7.6	27.6	2,149	4.8	23.1	22	4.1	1.9
Foreign Lang.	4,787	2.2	21.8	479	1.1	9.5	0	0	0
Philosophy	617	.3	10.1	27	.1	3.9	0	0	0
Religion	15	n	.3	7	n	.3	0	0	0
Humanities Total	21,846	10.2	23.5	2,662	6.0	14.9	22	4.1	.8
Geography	1,728	.8	51.8	154	.3	27.4	0	0	0
Psychology	6,686	3.1	22.6	921	2.1	22.9	4	.7	.2
Soc. Sci.	36,685	17.1	25.8	3,236	7.3	14.3	17	3.2	.6
Soc. Sci. Total	45,099	21.0	25.8	4,311	9.7	15.8	21	3.9	.4
Biology	8,293	3.9	23.3	1,155	2.6	20.1	13	2.4	.4
Computer Sci.	231	.1	24.7	8	n	8	0	0	0
Mathematics	9,440	4.4	34.5	1,344	3.0	23.5	7	1.3	.6
Physical Sci.	5,083	2.4	23.6	804	1.8	13.6	32	5.9	.8
Science Total	23,047	10.7	27.0	3,311	7.4	18.0	52	9.7	.6
Liberal Arts Total	89,992	41.9	25.5	10,284	23.1	16.2	95	17.7	.6
PROFESSIONAL FIELDS									
Agriculture	1,788	.8	22.1	44	.1	2.6	0	0	0
Architecture	143	.1	4.3	0	0	0	0	0	0
Bus. & Comm.	25,920	12.1	27.4	2,684	6.0	13.9	12	2.2	2.3
City Planning	37	n	25.3	0	0	0	0	0	0
Education	73,468	34.2	47.9	27,518	61.8	38.5	385	71.6	8.0
Engineering	6,141	2.9	14.8	1,077	2.4	7.1	24	4.5	.7
Fine & Appl. Arts	7,857	3.7	24.8	1,230	2.8	16.6	9	1.7	1.3
Folklore	0	0	0	3	n	9.4	0	0	0
Forestry	215	.1	11.2	18	n	4.8	0	0	0
Health	2,908	1.4	14.5	79	.2	1.9	2	.4	.7
Home Econ.	1,882	.9	20.7	205	.5	17.9	10	1.9	9.8
Law	76	n	18.3	5	n	.6	0	0	0
Library Sci.	712	.3	71.2	937	2.1	15.8	0	0	0
Military Sci.	96	n	5.1	0	0	0	0	0	0
Records Mgmt.	6	n	4.4	0	0	0	0	0	0
Trade & Indus.	1,861	.9	43.6	85	.2	65.9	0	0	0
Gen. Curriculum	1,703	.8	17.9	345	.8	18.7	1	.2	.7
Professional Total	124,813	58.1	32.7	34,230	76.9	26.2	443	82.3	4.1
Grand Total	214,805	100.0	29.3	44,514	100.0	22.9	538	100.0	2.1

Table 5a. Preliminary Analysis of Bachelor Degree Production of State Colleges and Universities and Employment Trends in the Period 1968-1980.

Broad Fields Subfields	Percent of SCU Bachelor Degrees, 1969	Estimated Employment 1968 (000)	Projected Employment 1980 (000)	Percent Employment Growth 1968-80
Col. No.	(1)	(2)	(3)	(4)
Humanities	10.2	67.0	80.0	27.1
Writers				
Social Sciences	21.0	270.6	446.1	64.9
General Social Sciences		73.3	107.3	46.4
Social Workers		160.0	270.0	66.7
Psychologists		32.0	58.0	81.3
Employment Counselors		5.3	10.8	102.3
Sciences	10.7	813.2	1,559.0	91.8
Mathematics		92.0	149.7	62.7
Natural Sciences		38.8	50.9	31.2
Life Sciences		181.0	257.0	42.0
Physical Sciences		176.4	276.9	57.0
Programmers		175.0	400.0	129.0
Systems Analysts		150.0	425.0	183.0
Architecture	.1	42.5	61.5	44.7
Architects		34.0	50.0	47.1
Landscape Architects		8.5	11.5	35.3
Business & Commerce	12.1	996.2	1,431.6	43.7
Business & Commerce		870.0	1,237.0	42.2
Bank Officers		125.0	193.0	53.8
Airline Dispatchers		1.2	1.6	33.3
City Planning	n*	52.0	81.5	56.7
Surveyors		45.0	68.0	50.2
Urban Planners		7.0	13.5	93.0
Education	34.2	2,278.5	2,505.0	9.9
Kgtn. & Elem. Teachers		1,230.0	1,270.0	3.3
Secondary Teachers		940.0	1,065.0	13.6
Rehabilitation Couns.		12.0	21.0	72.6
School Counselors		54.0	75.0	41.8
College Placement Off.		2.5	4.0	60.0
Recreation Workers		40.0	70.0	75.0
Engineering	2.9	2,117.3	3,002.0	42.0
Major Engr. Fields		1,100.0	1,500.0	36.4
Technicians		915.0	1,325.0	44.8
Air Traffic Controllers		14.6	18.0	23.5
Broadcast Technicians		20.0	23.0	14.9
Flight Engineers		7.5	12.0	59.3
Ground Radio Technicians		8.2	10.0	21.6
Pilots		52.0	114.0	116.9

* The letter "n" indicates a percentage less than .051.

Table 5a.(Concluded). Preliminary Analysis of Bachelor Degree Production of State Colleges and Universities and Employment Trends in the Period 1968-1980.

Broad Fields Subfields	Percent of SCU Bachelor Degrees, 1969	Estimated Employment 1968 (000)	Projected Employment 1980 (000)	Percent Employment Growth 1968-80
Col. No.	(1)	(2)	(3)	(4)
Fine and Applied Arts	3.7	438.0	515.3	17.6
Performing Arts		263.0	305.0	16.0
Commercial Artists		50.0	57.0	13.0
Interior Decorators		15.0	17.3	15.0
Photographers		60.0	72.0	20.0
Models		50.0	64.0	15.9
Forestry	.1	42.0	57.0	35.7
Health	1.4	1,158.5	1,760.0	52.0
Dental Hygienists		16.0	33.5	109.4
Dental Lab Technicians		27.0	37.5	38.9
Registered Nurses		660.0	1,000.0	51.5
Optometrists		17.0	21.0	23.5
Pharmacists		121.0	130.0	7.0
Podiatrists		8.5	9.5	11.8
Chiropractors		16.0	19.0	18.8
Occ. Therapists		7.0	19.0	171.4
Physical Therapists		14.0	36.0	157.1
Speech Path. & Audio.		18.0	33.0	83.3
Med. Lab. Workers		100.0	190.0	90.0
Radiological Tech.		75.0	120.0	60.0
Dieticians		30.0	42.1	40.3
Hospital Administrators		15.0	22.0	46.7
Sanitarians		10.0	14.0	40.0
Veterinarians		24.0	34.0	41.7
Home Economics	.9	100.0	130.0	30.0
Library Science	.3	118.0	155.0	31.4
Medical Librarians		12.0	20.0	66.7
Librarians		106.0	135.0	28.6
Trade & Industry	.9	315.0	411.5	30.6
Industrial Designers		10.0	11.5	15.0
Industrial Managers		15.0	17.0	13.3
Hotel Managers & Assts.		150.0	198.0	32.0
Purchasing Agents		140.0	185.0	32.1

Sources: Column 1 - Table A: Columns 2, 3 and 4, U.S. Department of Labor, Bureau of Labor Statistics Bulletin 1701, "Occupational Manpower and Training Needs." (1971)

Table 5b. Relation Between State College and University Supply in 1969 and National Employment Demand in 1980 for 14 Broad Fields.

Supply: State College and University Curriculum Proportion, 1969		Demand: Employment Growth 1968-1980	
		Below Median	Above Median
	Above Median	Humanities Education Fine Arts	Social Science Science Architecture Business and Commerce
	Below Median	Forestry Home Economics Library Science Trade and Industry	City Planning Engineering Health

Sources: Demand data from Table E. Supply data from Table A.

Notes: Table E contains 15 broad fields as defined by the Bureau of Labor Statistics.
Table A contains 20 broad fields as defined by the U.S. Office of Education.
Fifteen fields are common to both sources. Agriculture is omitted because of absence of reliable demand data.

Table 6a. UNDERGRADUATE ENROLLMENT (1970), MINORITY ENROLLMENT (1970), AND FINANCIAL AID AWARDS DATA (1969) FOR SCU's*
AND THE NUMBER OF FINANCIAL AID AWARDS FOR ALL INSTITUTIONS (1970), BY STATE IN USOE REGIONS I AND II

State	State Colleges and Universities																Financial Aid Awards by Category		
			Minority Target Population						Financial Aid Awards										
			Number			Per Cent			Number				Per Cent						
	No. Inst.	No. Full-time Undergrad. Students	Black	Other	Total	Black	Other	Total	Black	Other Minority	Other Students	Total	Black	Other Minority	Other Students	Total	NDSL	EOG	Work Study
Connecticut	4	17,472	307	144	451	1.8	.8	2.6	197	46	1,340	1,583	1.1	.3	7.7	9.1	6,417	3,201	3,600
Maine	6	6,480	11	50	61	.2	.8	.9	3	0	948	951	.0+	.0	14.6	14.7	3,726	1,331	1,800
Massachusetts	13	31,773	479	346	825	1.5	1.1	2.6	171	17	2,669	2,857	.5	.0+	8.4	9.0	25,090	10,501	13,800
New Hampshire	2	4,012	6	11	17	.1	.3	.4	4	0	629	633	.1	.0	15.7	15.8	3,327	1,279	1,900
New Jersey	9	31,801	1,625	528	2,153	5.1	1.7	6.8	908	119	2,564	3,591	2.9	.4	8.1	11.3	10,269	5,078	5,900
New York	16	91,354	6,405	3,228	9,633	7.0	3.5	10.5	1,737	593	9,196	11,526	1.9	.6	10.1	12.6	42,008	22,992	26,070
Rhode Island	1	3,601	80	18	98	2.2	.5	2.7	25	9	470	504	.7	.2	13.1	14.	4,342	1,596	1,300
Vermont	3	2,454	8	18	26	.3	.7	1.1	3	0	682	685	.1	.0	27.8	27.9	2,156	1,120	1,300
TOTAL	54	188,947	8,921	4,343	13,264	4.7	2.3	7.0	3,048	784	18,498	22,330	1.6	.4	9.8	11.8	97,335	47,098	55,670

*State colleges and universities

Note: In this region two institutions were founded during the 1969 fiscal year or after; thus, financial aid and enrollment data were not available.

Table 6b. UNDERGRADUATE ENROLLMENT (1970), MINORITY ENROLLMENT (1970), AND FINANCIAL AID AWARDS DATA (1969) FOR SCU's* AND THE NUMBER OF FINANCIAL AID AWARDS FOR ALL INSTITUTIONS (1970), BY STATE IN USOE REGION III

State	State Colleges and Universities																Financial Aid Awards by Category		
			Minority Target Population						Financial Aid Awards										
			Number			Per Cent			Number				Per Cent						
	No. Inst.	No. Full-time Undergrad. Students	Black	Other	Total	Black	Other	Total	Black	Other Minority	Other Students	Total	Black	Other Minority	Other Students	Total	NDSL	EOG	Work Study
District of Columbia	2	4,303	3,671	105	3,776	85.3	2.4	87.8	1,002	0	31	1,033	23.3	.0	.7	24.0	4,529	2,119	1,600
Maryland	7	15,994	5,924	235	6,159	37.0	1.5	38.5	2,218	4	862	3,084	13.9	.0+	5.4	19.3	7,068	3,248	4,000
Pennsylvania	14	58,810	3,152	174	3,326	5.4	.3	5.7	915	9	9,322	10,246	1.6	.0+	15.9	17.4	28,686	13,339	16,700
Virginia	11	24,866	4,302	98	4,400	17.3	.4	17.7	1,396	49	7,439	8,884	5.6	.2	30.	35.7	9,536	4,503	5,300
West Virginia	9	23,930	1,259	157	1,416	5.3	.7	5.9	656	5	4,517	5,178	2.7	.0+	18.9	21.6	6,526	2,807	5,100
TOTAL	43	127,903	18,308	769	19,007	14.3	.6	14.9	6,187	67	22,171	28,425	4.8	.1	17.3	22.2	56,345	26,016	32,700

*State colleges and universities

Note: In this region one institution was founded during the 1969 fiscal year or after; thus, financial aid and enrollment data were not available.

Table 6c. UNDERGRADUATE ENROLLMENT (1970), MINORITY ENROLLMENT (1970), AND FINANCIAL AID AWARDS DATA (1969) FOR SCU's* AND THE NUMBER OF FINANCIAL AID AWARDS FOR ALL INSTITUTIONS (1970), BY STATE IN USOE REGION IV

State	State Colleges and Universities																Financial Aid Awards by Category		
			Minority Target Population						Financial Aid Awards										
			Number			Per Cent			Number				Per Cent						
	No. Inst.	No. Full-time Undergrad. Students	Black	Other	Total	Black	Other	Total	Black	Other Minority	Other Students	Total	Black	Other Minority	Other Students	Total	NDSL	EOG	Work Study
Alabama	7	20,076	2,736	380	3,116	13.6	1.9	15.5	965	27	3,624	4,616	4.8	.1	18.1	23.0	11,278	6,340	9,900
Florida	7	24,294	4,237	546	4,783	17.4	2.2	19.7	1,133	109	2,305	3,547	4.7	.4	9.5	14.6	13,716	6,162	10,900
Georgia	12	31,060	5,208	181	5,389	16.8	.6	17.4	1,223	21	2,994	4,238	3.9	.1	9.6	13.6	10,231	5,312	7,300
Kentucky	5	29,185	1,141	49	1,190	3.9	.2	4.1	487	14	6,723	7,224	1.7	.0+	23.0	24.8	11,661	5,501	9,200
Mississippi	6	20,357	9,300	46	9,346	45.7	.2	45.9	3,212	29	2,331	5,572	15.8	.1	11.5	27.4	11,990	4,625	8,900
North Carolina	11	29,097	6,621	382	7,003	22.8	1.3	24.1	7,193	79	3,963	11,235	24.7	.3	13.6	38.6	18,627	8,300	13,800
South Carolina	3	4,660	217	8	225	4.7	.2	4.8	54	1	381	436	1.2	.0+	8.2	9.4	6,222	2,874	3,900
Tennessee	6	36,454	1,973	205	2,178	5.4	.6	6.0	637	15	3,433	4,085	1.7	.0+	9.4	11.2	14,155	7,233	9,000
TOTAL	57	195,183	31,433	1,797	33,230	16.1	.9	17.0	14,904	295	25,754	40,953	7.6	.2	13.2	21.0	97,880	46,347	72,900

*State colleges and universities

Note: In this region three institutions were founded during the 1969 fiscal year or after; thus, financial aid and enrollment data were not available.

Table 6d. UNDERGRADUATE ENROLLMENT (1970), MINORITY ENROLLMENT (1970), AND FINANCIAL AID AWARDS DATA (1969) FOR SCU's* AND THE NUMBER OF FINANCIAL AID AWARDS FOR ALL INSTITUTIONS (1970), BY STATE IN USOE REGION V

State	State Colleges and Universities																Financial Aid Awards by Category		
			Minority Target Population						Financial Aid Awards										
			Number			Per Cent			Number				Per Cent						
	No. Inst.	No. Full-time Undergrad. Students	Black	Other	Total	Black	Other	Total	Black	Other Minority	Other Students	Total	Black	Other Minority	Other Students	Total	NDSL	EOG	Work Study
Illinois	8	56,068	3,471	1,547	5,018	6.2	2.8	8.9	1,247	111	4,648	6,006	2.2	.2	8.3	10.7	23,162	13,588	12,000
Indiana	2	27,230	862	400	1,262	3.2	1.5	4.6	125	2	1,940	2,067	.5	.0+	7.1	7.6	17,814	7,649	6,800
Michigan	10	74,548	2,405	760	3,165	3.2	1.0	4.2	1,231	113	8,419	9,763	1.7	.2	11.3	13.1	24,639	11,621	13,000
Minnesota	6	33,556	209	277	486	.6	.8	1.4	112	68	6,159	6,339	.3	.2	18.4	18.9	17,845	7,869	7,600
Ohio	7	56,242	5,034	584	5,618	9.0	1.0	10.0	1,551	20	3,884	5,455	2.8	.0+	6.9	9.7	29,068	13,005	10,200
Wisconsin	9	52,789	447	442	889	.8	.8	1.7	259	72	11,872	12,203	.5	.1	22.5	23.1	17,699	8,345	11,900
TOTAL	42	300,433	12,428	4,010	16,438	4.1	1.3	5.5	4,525	386	36,922	41,833	1.5	.1	12.3	13.9	130,227	62,077	61,500

*State colleges and universities

Note: In this region two institutions were founded during the 1969 fiscal year or after; thus, financial aid and enrollment data were not available.

Table 6e. UNDERGRADUATE ENROLLMENT (1970), MINORITY ENROLLMENT (1970), AND FINANCIAL AID AWARDS DATA (1969) FOR SCU's* AND THE NUMBER OF FINANCIAL AID AWARDS FOR ALL INSTITUTIONS (1970), BY STATE IN USOE REGION VI

State	State Colleges and Universities															Financial Aid Awards by Category		
			Minority Target Population						Financial Aid Awards									
			Number			Per Cent			Number				Per Cent					
	No. Inst.	No. Full-time Undergrad. Students	Black	Other	Total	Black	Other	Total	Black	Other Minority	Other Students	Total	Black	Other Minority	Other Students	Total	NDSL	EOG	Work Study
Arkansas	6	18,107	1,043	26	1,069	5.8	.1	5.9	599	5	4,553	5,157	3.3	.0+	25.1	28.5	7,443	3,113	7,000
Louisiana	8	37,247	5,417	941	6,358	14.5	2.5	17.1	3,238	152	7,246	10,636	8.7	.4	19.5	28.6	8,668	4,884	10,200
New Mexico	4	8,061	282	2,345	2,627	3.5	29.1	32.6	64	783	425	1,272	.8	9.7	5.3	15.8	4,146	1,839	3,400
Oklahoma	8	24,642	1,062	1,968	3,030	4.3	8.0	12.3	368	129	4,589	5,086	1.5	.5	18.6	20.6	12,182	4,390	8,200
Texas	14	77,764	2,860	6,792	9,652	3.7	8.7	12.4	817	1,890	4,906	7,613	1.1	2.4	6.3	9.8	21,306	14,349	22,400
TOTAL	40	165,821	10,664	12,072	22,736	6.4	7.3	13.7	5,086	2,959	21,719	29,764	3.1	1.8	13.1	17.9	53,745	28,575	51,200

*State colleges and universities

Table 6f. UNDERGRADUATE ENROLLMENT (1970), MINORITY ENROLLMENT (1970), AND FINANCIAL AID AWARDS DATA (1969) FOR SCU's* AND THE NUMBER OF FINANCIAL AID AWARDS FOR ALL INSTITUTIONS (1970), BY STATE IN USOE REGIONS VII AND VIII

State	State Colleges and Universities																Financial Aid Awards by Category		
			Minority Target Population						Financial Aid Awards										
			Number			Per Cent			Number				Per Cent						
	No. Inst.	No. Full-time Undergrad. Students	Black	Other	Total	Black	Other	Total	Black	Other Minority	Other Students	Total	Black	Other Minority	Other Students	Total	NDSL	EOG	Work Study
Colorado	7	26,038	522	2,212	2,734	2.0	8.5	10.5	113	625	2,145	2,883	.4	2.4	8.2	11.1	9,442	4,126	4,800
Iowa	1	8,132	84	16	100	1.0	.2	1.2	75	4	1,422	1,501	.9	.0+	17.5	18.5	14,173	6,214	6,800
Kansas	4	21,529	601	290	891	2.8	1.3	4.1	276	54	3,847	4,177	1.3	.3	17.9	19.4	11,855	5,995	6,200
Missouri	8	37,507	1,347	346	1,693	3.6	.9	4.5	539	37	5,359	5,935	1.4	.1	14.3	15.8	16,714	6,849	9,200
Montana	4	6,536	11	231	242	.2	3.5	3.7	6	43	1,289	1,338	.1	.7	19.7	20.5	3,245	1,424	4,300
Nebraska	4	11,253	56	96	152	.5	.9	1.4	62	56	2,094	2,212	.6	.5	18.6	19.7	6,021	2,645	3,400
North Dakota	4	6,498	23	50	73	.4	.8	1.1	11	7	1,074	1,092	.2	.1	16.5	16.8	5,038	1,748	2,500
South Dakota	5	8,929	11	90	101	.1	1.0	1.1	6	26	1,810	1,842	.1	.3	20.3	20.6	5,255	1,893	2,500
Utah	2	8,767	84	216	300	1.0	2.5	3.4	77	56	1,252	1,385	.9	.6	14.3	15.8	3,410	2,412	3,000
TOTAL	39	135,189	2,739	3,547	6,286	2.0	2.6	4.6	1,165	908	20,292	22,365	.9	.7	15.0	16.5	75,153	33,306	42,700

*State colleges and universities

Table 6g. UNDERGRADUATE ENROLLMENT (1970), MINORITY ENROLLMENT (1970), AND FINANCIAL AID AWARDS DATA (1969) FOR SCU's* AND THE NUMBER OF FINANCIAL AID AWARDS FOR ALL INSTITUTIONS (1970), BY STATE IN USOE REGIONS IX AND X

State	State Colleges and Universities																Financial Aid Awards by Category		
			Minority Target Population						Financial Aid Awards										
			Number			Per Cent			Number				Per Cent						
	No. Inst.	No. Full-time Undergrad. Students	Black	Other	Total	Black	Other	Total	Black	Other Minority	Other Students	Total	Black	Other Minority	Other Students	Total	NDSL	EOG	Work Study
Arizona	1	7,602	104	1,299	1,403	1.4	17.1	18.5	121	256	719	1,096	1.6	3.4	9.5	14.4	5,486	2,585	3,700
California	20	148,968	7,140	17,218	24,358	4.8	11.6	16.4	3,573	3,980	11,872	19,425	2.4	2.7	8.0	13.0	37,926	20,950	29,700
Idaho	3	11,788	49	180	229	.4	1.5	1.9	34	43	1,519	1,596	.3	.4	12.9	13.5	1,872	1,083	1,800
Nevada	1	3,872	120	182	302	3.1	4.7	7.8	77	8	271	356	2.0	.2	7.0	9.2	1,030	273	700
Oregon	5	18,755	247	491	738	1.3	2.6	3.9	98	126	3,649	3,873	.5	.7	19.5	20.7	7,930	3,564	8,400
Washington	4	21,631	253	666	919	1.2	3.1	4.2	139	124	2,582	2,845	.6	.6	11.9	13.2	10,289	4,816	7,500
TOTAL	34	212,616	7,913	20,036	27,949	3.7	9.4	13.1	4,042	4,537	20,612	29,191	1.9	2.1	9.7	13.7	64,533	33,271	51,800

*State colleges and universities

Note: In this region one institution was founded during the 1969 fiscal year or after; thus, financial aid and enrollment data were not available.

Table 7. Tuition, Room and Board Median Figures for a Full Academic Year -- 1965-1971

Category	Academic Year							Average Annual Increase
	1965-66	1966-67	1967-68	1968-69	1969-70	1970-71	1971-72	
AASCU								
Tuition and Fees								
Resident	$242	$250	$260	$303	$350	$370	$405	11.2
Non-resident	520	528	600	683	788	840	874	11.3
Room								
Men	250	273	288	288	330	356	370	8.0
Women	250	270	288	298	332	356	370	8.0
Board								
Men	378	396	408	420	441	470	490	4.9
Women	378	390	407	420	441	470	490	4.9
Combined Room and Board*								
Men	690	700	810	807	832	837	849	3.8
Women	690	700	789	807	832	837	849	3.8
NASULGC								
Tuition and Fees								
Resident	311	333	352	360	430	443	482	9.2
Non-resident	734	782	850	905	966	1077	1260	11.9
Room								
Men	256	265	292	300	402	350	358	6.6
Women	270	270	314	315	410	350	358	5.4
Board								
Men	450	455	470	500	519	511	550	3.7
Women	449	450	476	500	514	511	550	3.7
Combined Room and Board*								
Men	N.A.	789	850	850	900	935	983	4.9
Women		795	850	836	900	935	983	4.7
U.S. Dept. of Labor Bureau of Labor Statistics Consumer Price Index (avg. for entire year) 1957-59=100	109.9	113.1	116.3	121.2	127.7	135.3	141.3**	5.2

* Combined room and board figures are given for schools which indicated they did not separate these charges.

** Estimates based on June index.

SPECIAL ANALYSIS OF RELATIONSHIPS AMONG RECOMMENDATIONS OF THE MEYERSON REPORT, CARNEGIE COMMISSION REPORTS, AND THE NEWMAN REPORT

The tables which follow represent an attempt to interrelate the recommendations of three major groups studying American higher education. This is an imprecise science for many reasons and in many ways.

The study procedures of the three groups differed greatly as did their methods of reporting recommendations. The Meyerson group reported its recommendations in the form of 85 serially numbered theses. Similar topics were listed in consecutive order in the series. The Carnegie Commission recommendations were in underlined paragraphs in nine of the Commission's 25-30 volumes. These volumes are listed on page 25 of this document.* The Newman Report did not formally separate recommendations from general commentary. The major recommendations entered in this Appendix were extracted from the narrative.

The analysis is organized in 9 sections corresponding to the 9 areas of concern of the National Commission on the Future of State Colleges and Universities. Each section is keyed to the serial numbering of the Meyerson recommendations. Related Carnegie and Newman recommendations are placed opposite in the center and right-hand columns. In some cases there is a Carnegie and/or a Newman recommendation on a topic which does not parallel a Meyerson recommendation. In such cases the left column is blank beside the Carnegie and/or Newman recommendations.

A tenth section contains recommendations of the three groups for general society rather than for higher education. An eleventh section contains recommendations specifically for junior/community colleges.

In some cases the following conditions prevailed:

1. Marginal relationship between recommendations.

2. The problem of selecting the appropriate topic which the recommendation should parallel.

In addition, not <u>all</u> Carnegie Commission recommendations are included. Many recommendations in "Higher Education and the Nation's Health" and the "Dissent and Disruption" Reports were considered only marginally related to the Meyerson and Newman recommendations.

* A key to the Carnegie Reports is included in the list on page 25.

SOURCE MATERIALS AND SPECIAL APPENDIX KEY

1. The report of the American Academy of Arts and Sciences in January 1971, known and referred to herein as the Meyerson Report.

2. Carnegie Commission Reports, especially the following titles which contain specific recommendations of the Commission:*

		Appendix Key
a.	"Quality and Equality: New Levels of Federal Responsibility for Higher Education," December 1968	QE
b.	"A Chance to Learn," March 1970	CL
c.	"The Open-Door Colleges," June 1970	ODC
d.	"Quality and Equality: Revised Recommendations New Levels of Federal Responsibility for Higher Education," June 1970	QE Supp.
e.	"Higher Education and the Nation's Health," October 1970	HENH
f.	"Less Time, More Options," January 1971	LTMO
g.	"From Isolation to Mainstream," February 1971	FITM
h.	"The Capitol and the Campus," April 1971	CC
i.	"Dissent and Disruption," June 1971	DD

3. The Newman Report

*Note: The Carnegie Commission publication, "New Students and New Places," was not available at the time this analysis was completed.

SPECIAL ANALYSIS OF RELATIONSHIPS AMONG RECOMMENDATIONS
OF THE MEYERSON REPORT, CARNEGIE COMMISSION REPORTS AND THE NEWMAN REPORT

I. PURPOSES, GOALS AND SCOPE

MEYERSON REPORT	CARNEGIE COMMISSION REPORTS	NEWMAN REPORT
46. Involvement in public service should contribute knowledge relevant to today's problems	Colleges should help with school desegregation (CL 5)	Develop new structural approaches of continuing education parallel to present form (N 69) Institutions should free themselves of peripheral activities unrelated to their purposes (N 83)
47. Study of higher education: universities should study education	Extensive research and the experimentation in area of education (CL 6)	Less concern with academic prestige and more with effective learning (N 62) Re-examine academic program in light of goals and aspirations (N 83) Create research universities devoted to generations of new knowledge and specialized graduate education (N 85) New degree-granting institutions be established (N 69)
69. Winning alumni support: continue education of alumni		
70. Winning alumni support: Inform public on higher education		
71. Institutional publications should reflect institutions' character and programs		
72. Institutional publications: "Hansard" to report all actions--executive and legislative		
73. Future of private institutions: private colleges ought to exist as sources of experimentation with foundation help		

SPECIAL ANALYSIS OF RELATIONSHIPS AMONG RECOMMENDATIONS
OF THE MEYERSON REPORT, CARNEGIE COMMISSION REPORTS AND THE NEWMAN REPORT

I. PURPOSES, GOALS AND SCOPE

MEYERSON REPORT	CARNEGIE COMMISSION REPORTS	NEWMAN REPORT
76. Producing greater differentiation: Institutions should not imitate others		New educational enterprises, both public and private, which offer real diversity (N 61) The identity, integrity and chance to explore new direction must be enhanced (N 62) Determined effort to strengthen and differentiate the mission of higher education institutions (N 82)
77. Women's colleges should not abandon their identity		Make higher education more responsive to the needs of women (N 80)
78. Negro colleges: Other opportunities for blacks, with public and private resources	Negro colleges should try to overcome their historical disadvantage (FITM 50) All institutions should accept responsibility to serve the disadvantaged minorities (CL 13)	

SPECIAL ANALYSIS OF RELATIONSHIPS AMONG RECOMMENDATIONS
OF THE MEYERSON REPORT, CARNEGIE COMMISSION REPORTS AND THE NEWMAN REPORT

II. CURRICULUM

MEYERSON REPORT	CARNEGIE COMMISSION REPORTS	NEWMAN REPORT
2. Education of the poor: remedial	Provide remedial education (ODC 22) Colleges should devote part of the summer program to camps for disadvantaged children (CL 9) Establish regional research centers on academically disadvantaged and train teachers to work with these students (FITM 30) Negro colleges: concern with curriculum innovation and development of preprofessional programs (FITM 29) Establishment of a "foundation year" for interested students (CL 14) Colleges should establish programs for early development of verbal skills (CL 9)	Experimentation with forms of education to adapt college to minority student (N 79)
8. Education for employment: develop institutions for those not interested in formal education	Negro colleges should provide education for adult members of the community (FITM 34) Educational opportunities outside college for credit, i.e. vocational, inservice training (LTMO 13) Routes to professions other than full time college (LTMO 14)	Expand educational internship and apprenticeship programs (N 68)
12. Deferring or interrupting studies: no schedules for studies	Develop opportunities to "sandwich" work and study (LTMO 19)	
13. Study and work: counseling for new educational and employment combinations	Employment opportunities at points after high school and throughout college (LTMO 13)	Accept experience as a legitimate part of education (N 64)
14. Credit by examination: Develop national and institutional examinations for B.A.		Equivalency examinations should be developed (N 69)

SPECIAL ANALYSIS OF RELATIONSHIPS AMONG RECOMMENDATIONS
OF THE MEYERSON REPORT, CARNEGIE COMMISSION REPORTS AND THE NEWMAN REPORT

II. CURRICULUM

MEYERSON REPORT	CARNEGIE COMMISSION REPORTS	NEWMAN REPORT
15. Shorter graduate programs with or without degrees	Degree every two years three-year B.A.s, and Ph.D. or M.D. shortened by one or two years (LTMO 15) Six instead of eight years after B.A. to practicing M.D. (HENH 9) Three years after B.A. to M.D. or D.D.S. and three-year residency (HENH 49)	
20. Preparation of college teachers: greater flexibility in graduate studies	Wider acceptance of certain other degrees, i.e. master of philosophy, doctor of arts (LTMO 16)	Experimentation in graduate education based on models of instructional responsiveness (N 78)
21. Preparation of college teachers: apprenticeship programs	Negro colleges should identify and support young negroes interested in becoming college teachers (FITM 62)	
23. Evaluating research: encourage scholarly effort by teachers		
29. Curricular experiments: varied experiments		Introduce programs in female studies (N 81)
30. Curricular experiments: develop new attitudes toward learning		
31. Curricular experiments: understanding modern man's predicament		
32. Science for non-scientists: science programs for students in other fields		
33. Study of languages: programs to use languages in study of other cultures		
35. Early specialization: immediate entry into advanced professional or academic study	Universities with health science centers should accelerate premedical and medical education (HENH 49)	

SPECIAL ANALYSIS OF RELATIONSHIPS AMONG RECOMMENDATIONS
OF THE MEYERSON REPORT, CARNEGIE COMMISSION REPORTS AND THE NEWMAN REPORT

II. CURRICULUM

MEYERSON REPORT	CARNEGIE COMMISSION REPORTS	NEWMAN REPORT
36. Revision of graduate study: too impersonal and prolonged: obscure requirements (dissertation)		
37. Professional education: greater links between professions and arts and sciences	Careful integration of biomedical sciences and social sciences (HENH 93)	
41. Role of research: unite teaching and research		
42. Role of research: only research that is linked to teaching		
43. Role of research: secret research should be discontinued		
44. Role of research: consider effects of large scale sponsored programs on institutional programs and faculty		
45. Role of research: encourage individual research		

SPECIAL ANALYSIS OF RELATIONSHIPS AMONG RECOMMENDATIONS
OF THE MEYERSON REPORT, CARNEGIE COMMISSION REPORTS AND THE NEWMAN REPORT

II. CURRICULUM

MEYERSON REPORT	CARNEGIE COMMISSION REPORTS	NEWMAN REPORT
	University health centers should develop programs to train medical and dental assistants (HENH 45)	
	Convert schools of osteopathy to schools of medicine (HENH 45)	
	Award a M.A. at end of the basic training (HENH 52)	
	Greater integration of pre-professional and professional curricula (HENH 52)	
	Increase student option: basic training in health-related subjects can lead to training in a variety of health-related professions (HENH 52)	
	University health science centers should consider curriculum reforms: more flexible admission policies (HENH 54)	
	Comprehensive and community colleges should develop curricula in allied health professions (HENH 95)	

SPECIAL ANALYSIS OF RELATIONSHIPS AMONG RECOMMENDATIONS
OF THE MEYERSON REPORT, CARNEGIE COMMISSION REPORTS AND THE NEWMAN REPORT

III. INSTRUCTION

MEYERSON REPORT	CARNEGIE COMMISSION REPORTS	NEWMAN REPORT
24. Evaluating teaching: better appraisal of teachers with student opinion		Make higher education a place "where the action is" not only in research but also in teaching and learning (N 67)
34. Instruction of undergraduates: new kinds of instruction not aimed toward graduate study		
38. Innovations in instruction: independent study, tutorials, audio-visual sharing, outside study	Colleges should establish education opportunity centers in low income areas (CL 7)	New educational enterprises other than the classroom lecture-reading format (N 64)
		Establish regional television colleges (N 70)

SPECIAL ANALYSIS OF RELATIONSHIPS AMONG RECOMMENDATIONS
OF THE MEYERSON REPORT, CARNEGIE COMMISSION REPORTS AND THE NEWMAN REPORT

IV. GOVERNANCE AND ORGANIZATION

MEYERSON REPORT	CARNEGIE COMMISSION REPORTS	NEWMAN REPORT
4. Women in higher education: more on staff		A broadened and diversified effort for women participating in higher education on an equal basis (N 80)
16. Academic profession: more access for everyone	Colleges should develop administrative intern programs for black students (FITM 64) White colleges should consider appointing blacks in administrative positions (FITM 64) Negro colleges should expand the pool of teaching talent by use of teacher exchange, joint appointments, etc. (FITM 63)	
17. Academic profession: don't require Ph.D.	Employers hire and promote on basis of talent alone as well as on prior certification (LTMO 14)	
18. Academic profession: advertise positions		
19. Academic profession: Recruit teachers from non-academic fields		Develop a diversified faculty that includes members who have experiences beyond the traditional graduate department (N 64)
22. Recruit women professors		
25. Evaluating teaching: more concern for intellectual growth of faculty		
26. Tenure and staff regulation: differential rewards for merit in teaching		
27. Tenure and self-regulation: faculty generated code of conduct and responsibility		Revision of standard tenure policies: short-term contracts for at least some categories of faculty positions (N 77)
28. Tenure and self-regulation: pensions for retirement after 20 years		

SPECIAL ANALYSIS OF RELATIONSHIPS AMONG RECOMMENDATIONS
OF THE MEYERSON REPORT, CARNEGIE COMMISSION REPORTS AND THE NEWMAN REPORT

IV. GOVERNANCE AND ORGANIZATION

MEYERSON REPORT	CARNEGIE COMMISSION REPORTS	NEWMAN REPORT
39. Reform of academic calendar: more flexible schedules for students and faculty		More experience away from the campus for both students and faculty (N 61)
48. Modes of governance: division of responsibility: sharing of information: system of accountability exists to make education possible	State governments should have major responsibility for systems of postsecondary education (CC 16) Public and private institutions should establish guidelines defining state concern and control (CC 107)	
49. Modes of governance: governance system should be educative		
50. Governing board: trustees chosen for judgment and vision	Appointments by governor to governing boards or coordinating agencies should be made with the consent of state senate (CC 20) State should resist establishing single governing boards (CC 29) Develop adequate screening of candidates for governing boards (CC 107)	
51. Governing board functions: planning, select president, finance liaison with public	Only 1 budget review by a state agency (CC 29) Coordinating agencies should advise on: use of resources, quality, access function of university (CC 29) States should review funding levels of coordinating agencies (CC 30) State attention to appropriate functions for various types of schools (CC 34)	Serious study must be given to recasting the role of focused state level governance (N 72)
52. Governing board: more minority group members		

SPECIAL ANALYSIS OF RELATIONSHIPS AMONG RECOMMENDATIONS
OF THE MEYERSON REPORT, CARNEGIE COMMISSION REPORTS AND THE NEWMAN REPORT

IV. GOVERNANCE AND ORGANIZATION

MEYERSON REPORT	CARNEGIE COMMISSION REPORTS	NEWMAN REPORT
53. Governing board: outside people on board more contact with faculty students and staff	Governors should not serve as voting members or chairmen on governing boards or coordinating agencies (CC 20)	
	Increase representation of laity on governing boards (CC 30) Elected officials should not serve on governing boards (CC 107)	
54. Governing board: buffer role between college and political pressure	States should strongly resist investing coordinating agencies with administrative authority (especially over budgeting) (CC 28) Coordinating agencies - buffer between universities and legislative and public interference (CC 30) Institutions should examine their own levels of cooperation (CC 31)	
55. Academic administration: strengthen office of president: define role of president		
56. Academic administrator: large institutions should have 2 or 3 top men		
57. Academic administrator: combination of associational and executive system		
58. Academic administrator: administrators should have faculty backgrounds		
59. Academic administration: need strong academic deans or department heads		

SPECIAL ANALYSIS OF RELATIONSHIPS AMONG RECOMMENDATIONS
OF THE MEYERSON REPORT, CARNEGIE COMMISSION REPORTS AND THE NEWMAN REPORT

IV. GOVERNANCE AND ORGANIZATION

MEYERSON REPORT	CARNEGIE COMMISSION REPORTS	NEWMAN REPORT
60. Faculty/student representation: more faculty involvement in governance		
61. Faculty/student representation: less faculty/student committee with staff	Boards increase acceptance by institutions: more consultation: exchanges of personnel: joint board and institution staff seminars: study problems (CC 31)	
62. Faculty/student representation: should have separate faculty and student senates besides campus-wide senate		
63. Use of faculty expertise: use of talents of faculty in governance	States: attract talented people to serve on coordinating agencies: i.e. salaries, leaves, fringe benefits (CC 30)	
64. Students in governance: student involvement in schools and departments		
65. Students in governance: more responsibility to students		
66. "Non-professoriate:" more involvement of staff		
67. Use of initiative: prompt action on new policies		
68. Ombudsman experiment		
	Establish a Commission within ACE on external interference with institutional independence (CC 107)	

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IV. GOVERNANCE AND ORGANIZATION

MEYERSON REPORT	CARNEGIE COMMISSION REPORTS	NEWMAN REPORT
81. Filling faculty vacancy: every faculty vacancy revert to campus-wide pool		
83. Sharing resources: expensive equipment: talented teachers concentrated in one field		
84. Cooperation in education: experimentation by groups of colleges		
85. Primary, secondary education: more cooperation with lower schools		
	Universities should appoint officer to plan expansion of university health service centers so as to perform educational research and community service functions (HENH 93)	
		Attract imaginative individuals to careers in higher education and to entrepreneurial tasks (N 66)

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V. STUDENT ACCESS

MEYERSON REPORT	CARNEGIE COMMISSION REPORTS	NEWMAN REPORT
1. Access for the poor: increased access	Establish recruiting and counseling pools among neighboring colleges for admitting disadvantaged candidates (CTL 8) Graduate and professional schools should give special consideration to candidates from Negro colleges (FITM 32) Graduate and professional schools should coordinate recruiting of disadvantaged students (CL 8)	Minority students should have an avenue of entry into senior colleges as well as community colleges. (N 79)
3. Women in higher education: more access especially to higher education		
5. Older students: admit at any age	Provide for reentry to college at any age (LTMO 19) Include time span from immediately after high school throughout life (CC 34)	Halt the academic lockstep and reconstitute our educational institutions for individuals of all ages (N 67) Provide "second chance" opportunity for college education (N 68)
6. Older students: more concern for providing opportunities		Admit students who do not immediately matriculate (N 67) Admission: favor students who have had experience outside school (N 67)
	State attention to accessibility: spaces, aid, geographical standards (CC 34) Scheduling to accommodate students' work schedules, geographical locations and home responsibilities (LTMO 20)	Institutions should provide resources to the community as separate services so that individuals and groups can find their own way to an education (N 69)
	State attention to articulation among various elements of higher education (CC 34) States facilitate transfer to four-year school from two-year school (ODC 18)	

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V. STUDENT ACCESS

MEYERSON REPORT	CARNEGIE COMMISSION REPORTS	NEWMAN REPORT
	Four-year schools should be prepared to accept transfer and give them full credit (CL 13) Equal opportunity in education: the first priority should be increased effectiveness of lower schools (CL 5) All states should take steps to increase the number of students who finish high school (CC 56)	
	Grant immediate resident status to students whose families come to a state for other than education (CC 59)	
	Raise quality of graduate education by allowing out-of-state students (CC 60) Steps should be taken to increase geographical accessibility (CC 56) Develop student exchange programs between states (CC 61) States having a ratio of less than 30 places in institutions (public and private) for every 100 18-21 year-olds should take emergency steps to increase availability of higher education (CC 113) States should provide universal access to the total system (CL 13) By the year 2000 Negro colleges should have enrollments in keeping with comparable institutions. (FITM 36)	

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VI. FINANCE

MEYERSON REPORT	CARNEGIE COMMISSION REPORTS	NEWMAN REPORT
	Provide aid to medical schools and health service programs for increasing capacity and aid new schools' personnel training and neighborhood health service programs (QE 33)	
	Federal government should meet more costs of medical and dental education (HENH 10)	
	Develop relatively low uniform national tuition policy for medical and dental schools (HENH 68)	
	States support private medical and dental schools (HENH 10)	
	Provide federal grants up to $4000 per year for disadvantaged medical and dental students (HENH 65)	
	Construction grants up to 75% of cost and the rest available in loans (HENH 73)	
	Cost-of-construction supplements to university health science centers for each student (and house officer) (HENH 71)	
	Provide bonuses for enrollment expansion in the health field (HENH 71)	
	Provide bonuses for curricular reform (HENH 71)	
	Three-year medical school should receive the same amount of institutional aid as four-year school (HENH 70)	

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VI. FINANCE

MEYERSON REPORT	CARNEGIE COMMISSION REPORTS	NEWMAN REPORT
	Increased aid to part-time students (QE 6 Supp)	Award financial aid so as to encourage experience outside formal education (N 68)
	Federal funds to provide part-time employment for undergraduates (QE 23) State should have low tuition or no tuition charges (ODC 46) States should increase the number of college students by increasing financial commitment to higher education (CC 56) No tuition or very low tuition for first two years of state college (CC 86) States should not increase enrollment more than the per capita personal disposable income rises (CC 85) Phasing out of present doctoral fellowship programs and the establishment of doctoral fellowship programs on basis of ability without regard to need (QE 15 Supp) Establishment of doctoral fellowship program (QE 26)	

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VI. FINANCE

MEYERSON REPORT	CARNEGIE COMMISSION REPORTS	NEWMAN REPORT
9. Deferred payment of costs: increase student financial aid "Educaid"	Federal government should charter a national student loan bank (QE 9 Supp)	
	Two years of college "in the bank" after high school to be used any time (LTMO 20) Federal loan program should be established for all students regardless of need (QE 29)	
	Expansion of work-study program with federal funding (QE 6 Supp)	Expand joint work-study scholarships (N 76)
	Grants to students in vocational and technical schools (QE 7 Supp)	Provide funds to institutions in the form of grants for certain categories of students (N 74)
	Continuance of veterans' educational benefit programs (QE 19 Supp)	
	Strengthen program of education opportunity grants by: 1. aid to all students with need. 2. aid available for four-year undergraduate and two-year graduate work (QE 19)	
	Federal government grant cost-of-education supplements to colleges on basis of number of students holding federal grants there (QE 30)	
	Each college should receive grant equal to 10% of education opportunity grants held by students there (QE 22)	
	Students with education opportunity grant and non-federal grants receive support grant equal to non-federal grant but not more than education opportunity grant (QE 21)	
	States should establish programs of tuition grants for public and private institutions on basis of financial aid (CC 86)	

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VI. FINANCE

MEYERSON REPORT	CARNEGIE COMMISSION REPORTS	NEWMAN REPORT
74. Selective support of excellence: selective support ought to be fought for	States should make construction loans to private institutions (CC 97)	Create conditions under which new educational enterprises can be founded and can endure (N 63)
	Increase federal funding of university and college research (QE 40)	Provide a sizable portion of the resources to students and allow them to create a "market" for education (N 65)
	Selected universities should be federally funded to do graduate talent search and developmental programs (QE 25)	States should provide part of the funds in the form of competitive grants (at least 1/3) (N 65)
	Provide a strong private sector by state grants equivalent to land-grant (CC 66)	
	Increase funding to programs of guidance, counseling and testing to find able student (increased to $30 million in 1970-71) (QE 24)	
	States should make grants to continue certain educational programs at private colleges (CC 97)	
	Increase federal grants for academic construction renovation and replacement (QE 37)	
	Increased funding to: 1. Aid to developing institutions 2. Library support 3. International studies (QE 41)	
	Students attending private colleges should be given up to 1/3 of the subsidy for students in state colleges (CC 98)	
80. Budgeting: directed to reallocation of total resources instead of annual increments: Substitution of programs rather than develop new ones	Federal government assist with: 1. Funds for state planning 2. Start-up grants 3. Construct funds 4. Cost-of-education allowance 5. Grants, work-study, student loans 6. Federal training grants (ODC 43)	Assess how effectively available resources are utilized (N 62)
	States should compare compensation paid to faculty at all state-supported schools (FITM 46)	

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VI. FINANCE

MEYERSON REPORT	CARNEGIE COMMISSION REPORTS	NEWMAN REPORT
	States should have 1/2 to 2/3 of financial burden and some should rest with the city (ODC 45) States with 0.6% of per capita personal income spent on higher education should take immediate steps to increase financial support (CC 114)	Establish specific programs directed exclusively to encourage new enterprises (N 65)
	Federal and state funds should be provided to colleges for programs to help inner city schools (CL 6) Funds for meeting needs of rural disadvantaged schools (CL 7)	
	Negro colleges should ask state for support and development of programs to improve the skills of elementary and secondary school teachers (FITM 30) Negro colleges with strong Afro American programs should be urged to seek financial support to further develop them (FITM 33) Negro colleges should seek help for states in paying faculty salaries while they complete doctorates at other institutions (FITM 62)	

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VII. STUDENT LIFE

MEYERSON REPORT	CARNEGIE COMMISSION REPORTS	NEWMAN REPORT
40. Consider placing extra curricular activities wholly under student control		
75. Minimizing size disadvantages: large institutions should create intimacy		
82. Non-educational services: private industry or non-profit organizations can take over services: i.e. housing, counseling: health services		
	Presidents should be given the authority to deal with emergency situations involving students (DD 67)	
	Colleges should formulate rules regulating the time, place and manner of peaceful assemblies (DD 65)	
	Colleges should establish regular channels for hearing grievances and suggestions (DD 64)	
	Decisions should be based on wide consultation (DD 64)	
	Non-violent disruption should be met with nonviolent actions without force (DD 68)	
	Disruption should be met by full efforts to end it without excessive use of force (DD 14)	
	Responses to events on campus should be based on the distinction between dissent and disruption (DD 13)	
	Repression should be rejected (DD 13)	
	Violent action should be met immediately by enforcement of law (DD 68)	

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VII. STUDENT LIFE

MEYERSON REPORT	CARNEGIE COMMISSION REPORTS	NEWMAN REPORT
	Faculty and student marshals should be used to monitor organized protest (DD 65)	
	Colleges should protest dissent as a democratic right and as a renewal for society (DD 13)	
	The administration should keep the campus and trustees informed of its decisions and the reasons for them (DD 68)	

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VIII. QUALITY AND EFFECTIVENESS

MEYERSON REPORT	CARNEGIE COMMISSION REPORTS	NEWMAN REPORT
10. Study reduction in degree granting function		
11. Certify other bodies to have degree granting authorities		
	Establish a single program of accreditation (ODC 49)	Place less reliance on accrediting organizations when determining eligibility for federal support (N 66) The composition of accrediting organizations should include representatives of the public (N 66)
	States should have continuing evaluation studies of these colleges (ODC 46) Colleges should prepare annual report on their contribution to equal opportunity (CL 13) Business and industry should be advised of the rapid changes taking place in Negro colleges (FITM 60)	Evaluate the results of the national commitment to minority education (N 79)
	U.S. Office of Education to expand statistics (ODC 44) Establish unit in Office of Education to coordinate and evaluate available data (CL 26)	
	Foundations: government agencies and higher education associations should make studies of management problems of universities (CC 97)	

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IX. PLANNING AND CHANGE

MEYERSON REPORT	CARNEGIE COMMISSION REPORTS	NEWMAN REPORT
79. Long-range planning: development of institutional research for self-study and planning	Attention should be given to institutional diversity and flexibility to permit adaptation as educational needs change (CC 34) Basic reassessment every 5-10 years or whenever necessary (CC 36) Evaluate present and potential contributions of all post-secondary institutions (CC 34)	
	Orderly growth and location of new campuses: development of new schools: optimum size (CC 34)	Institutions must make major reforms rather than simply expanding present system (N 61)
	Coordinating agencies should have authority to approve new institutions and new degree programs and allocate funds under state administration and federal programs (CC 36) Increase the number of median school entrants to 15,300 by 1976 and to 16,400 by 1978. (HENH 44) New public health schools should be made part of university health science centers (HENH 53) Convert two-year medical schools to four-year (HENH 52)	
	Negro colleges should plan to accomodate enrollments that may double by the year 2000 (FITM 18)	

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X. SOCIETY

MEYERSON REPORT	CARNEGIE COMMISSION REPORTS	NEWMAN REPORT
7. Education for employment: more jobs which don't require college		
		Establish an agency to aid and develop indigenous voluntary organizations devoted to social problem solving (N 76) Minority education: realistic and publicly stated commitment to broadly based minority education (N 80) Provide new opportunities for the young, such as ecology corps, conservation corps, peace corps (N 75)
	Develop nine new university health science centers (HENH 55) Develop area health education centers away from universities: Should establish 126 (HENH 58) Establish education opportunity bank for medical and dental students (HENH 66) Develop a voluntary national health service corps (HENH 66) Establish a national foundation for the development of higher education to encourage, advise, review and provide funding for programs and give new directions in all aspects of higher education QE 45)	

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XI. JUNIOR COLLEGE

The government should stimulate the expansion of occupational education in community colleges (ODC 21)

All two-year colleges should award A.A. for two-year curriculum: students with advanced standing option to earn A.A. in less than two years (ODC 17)

Community colleges should provide all sorts of educational opportunities for the entire community (ODC 17)

Community colleges provide guidance involving professional counseling and faculty in cooperation with high schools and employment offices (ODC 22)

Two-year colleges have an important role and should not convert to four-year (ODC 16)

Keep two-year colleges in the range of 2,000 to 5,000 daytime students (ODC 31)

States should establish community colleges along with specialized two-year institutions (ODC 26)

States should form local community college districts (ODC 48)

Start-up grants for junior and urban colleges (QE 38)

Community colleges should be within commuting distance of all students (CL 13)

States should have community colleges within commuting distance of every student by 1980 (ODC 38)

Legislation should be enacted granting admission to community colleges of all high school graduates who are 18 and would benefit (ODC 15)

Community colleges should develop distinctive missions (N 62)